

# THE IMPACT OF FULL RANGE LEADERSHIP DEVELOPMENT ON LEADERSHIP PERFORMANCE AND EFFECTIVE LEADERSHIP BEHAVIOR

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**Abstract:** *Effective leadership has a significant impact on the ability of organizations to implement and sustain strategic change initiatives and meet performance expectations. Many organizations devote considerable resources and energy to develop effective leadership capacity through extensive training programs. This paper aims to examine the impact of the Full Range Leadership Development Program (FR-LDP) on effective leadership behavior and leadership outcome performance. The participants were 31 middle managers at a Thai furniture company, who attended a six-month development program of three alternating training sessions and on-the-job practice. Integrated multi-methods with action research design were employed, including training workshop, assessment of multi-rater feedback, peer coaching, and self- and group reflections. The 360-degree feedback survey of the MLQ 5X Short was used to collect data that measure change in effective leadership (transformational leadership and active transactional leadership) and the overall leadership outcome performance of both pre- and post OD interventions. The study revealed that the FR-LDP intervention was effective in improving middle managers' effective leadership and overall leadership outcome performance. Participants perceived it as a reliable intervention that can prepare them to perform effective leadership in their normal workplace setting.*

**Key words:** *Full Range Leadership Development Program, effective leadership, ODI*

## Introduction

Organizations face a number of dramatic and rapid changes in today's globalized world and information age (Sosik & Jung, 2010; Vardiman, Houghston & Jinkerson, 2006; Kur & Bunning, 2002; Day, 2001; Bass, 1990). For example, demographic changes and workforce migration have increased the need for organizations to understand how to motivate people of different generations, appreciate and leverage the power of diversity, and match their skill sets to solve the challenges facing the organization (Sosik & Jung, 2010). New advanced technology has open new marketplace opportunities for business and created a virtual world for socialization; organizations need to capitalize on the technology both for business and collaborative networking. And environmental issues have created a need for organizations to find a more environmentally friendly approach to produce products or utilize natural resources efficiently.

To survive and achieve performance beyond expectations, organizations need effective leaders to respond to these changes, creatively address these challenges, timely

innovate, effectively adapt and leverage the opportunities arising from these trends (Vardiman et al., 2006; Iles & Preece, 2006; Day, 2001; Bass, 1990). These leaders act as role models; project an image of confidence, commitment, and mission focus; have an exciting vision; challenge the status quo; continuously innovate; and coach and mentor their followers to achieve their full potential and performance (Sosik & Jung, 2010).

Middle Managers represent an interesting group in that they are the key group that faces a critical challenge to balance the multiple stakeholders' needs (Lowman, 2002, p.191-192). For example, they have the critical role of managing a smooth business operation as well as interpreting and framing the organization's vision and mission and aligning the strategic objectives in order to lead front-line staff to implement policies; and contributing to both organizational continuity and change (McGurk, 2009, p.465; Yukl, 2006, p.37). They need to understand the concerns and limitations of their direct reports while working for a supervisor to achieve performance expectations. They play an important role in cross-departmental initiatives and also are accountable to internal and external customers (Lowman, 2002, p.191). They require the skills to control people and

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resources to implement business plans. On the other hand they also need to be able to reflect upon their experiences and relationships with others and work effectively with staff to deliver strategic changes. In short, to be effective, middle managers are required to strike the right balance of management and leadership skills (McGurk, 2009).

Many organizations devote considerable energy and resources to develop effective leadership capacity through extensive training programs. However, a good number of these companies achieved only 10 - 15 percent of the leadership training results in transferring learning to work (Cromwell & Kolb, 2004). Searching for reasons, Armenakis, Bernerth, Pitts and Walker (2007) argued that what matters is the participants' perception of whether a leadership development program prepares them well with adequate knowledge and skills required for taking effective actions. Amagoh (2009) pointed out that the success of any leadership development process, however, depends largely on the ability to encourage participants to practice new skills and reflect on learning experiences in order to promote a transfer of knowledge and skills to workplace contexts.

The Thai Furniture Company considered in this study is a leading manufacturer and distributor of modern, contemporary furniture for commercial and household use. The company was founded in 1980 by five cofounders who have been long time friends. They have been leading the company's operations for the past thirty years with remarkable marketing achievements and have established it as a leader in the premium furniture sector. In 2009, the company employed 2,500 people and had annual sales of 3.0 billion baht with strong growth projection in the next five years. In order to continue the organization's success story and support future growth, the company's management set as its mission to leverage its people as another key competitive advantage.

One strategy is to develop middle management people with potential level as effective in managing the tasks and leading his/her teams to effectively deliver performance. To this end, the company identified and prepared a number of potential candidates for filling the vacancies in leadership positions as a result of turnover, retirement, business expansion and a shrinking

application pool. Special talent programs and intensive series of training workshops as well as assignments have been arranged and progress monitored accordingly. Despite continuous development support, there are still gaps in effective leadership at the middle management level. According to the President, most of the key talent managed their jobs well but are not much of leaders, especially when collaborative effort across the departments are required.

Based on an organizational assessment, the key issues of the company's talent development program have been grouped under three main items: (1) the former leadership development programs did not apply an effective leadership model that has been proven to have significant impact on the participant's leadership outcome. Thus, the organization requires an effective leadership model that will be able to enhance the leadership's outcome performance, including leaders' effectiveness and employee's satisfaction with the leaders and their extra efforts; (2) former leadership training programs did not prepare the participants well enough to enhance their effective leadership. The programs contents and their practical aspects may have been inadequate for effective learning transfer; and (3) existing human resource development programs over-emphasized training over "learning in action". For effective intervention, human resource (HR) could encourage application of leadership in the day-to-day operations to ensure that new behaviors are positively experienced and skills developed in a way that enhances their confidence in their practice.

After considering the literature review, articulating the conceptual framework, and reviewing the methodology, the ODIs will be analyzed and discussed.

## **1. Literature Review**

### **- Leadership**

Leadership has been defined in various ways including traits, behaviors, skills, competency, interaction patterns, and role relationships (Gill, 2006; Yukl, 2006). Although there seems to be no consensus on its definition and what effective leadership is in business, one common perspective is that leadership is a social process whereby an individual expresses behaviors that influence a group of individuals to foster coordination,

cooperation, build network and unity toward the accomplishment of shared objectives (McCallum & O'Connell, 2009; Vardiman et al., 2006; Yukl, 2006; Iles & Preece, 2006; Northouse, 2004; Avery, 2004; Day, 2001, p. 582).

Contemporary literature on leadership focuses on the two main dimensions of leadership i.e. transactional and transformational leadership. Transactional leadership is a social exchange process of providing valued rewards that were promised in exchange for performance (Sosik & Jung, 2010). Transformational leadership is the influence process of leaders to engage followers. It aims to raise the level of motivation, social consciousness and also morality in both leaders and followers and help them transcend their self-interest for the higher needs towards exceptional performance (*Ibid*). Leaders who are high in transactional leadership tend to be low on transformational leadership and vice versa (Northouse, 2004). However, as Bass (1985) argued, both types of leadership are not mutually exclusive. Transformational leadership is rather independent and complementary to transactional leadership (Judge & Piccolo, 2004; Sosik & Jung, 2010; Howell & Avolio, 1993; Alimo-Metcalfe & Alban-Metcalfe, 2001, p. 2). It enhances the effectiveness of the leader over and above what he/she could achieve through transactional leadership alone (Judge & Piccolo, 2004). Although most leaders engage in transactional forms of leadership by providing feedback contingent on performance, exceptional leaders go beyond this and engage in transformational forms of leadership behavior (Sosik & Jung, 2010). The most effective leaders incorporate both transactional and transformational behaviors at appropriate times and in appropriate ways to followers (Sosik & Jung, 2010; Judge & Piccolo, 2004; Bass, 1996).

- *The Full Range Leadership Development (FRLD) model*

The FRLD model refers to a leadership training system that proposes that leaders vary in the extent to which they display a repertoire of leadership behaviors, ranging from active and more effective leadership to passive and less effective leadership (Sosik & Jung, 2010; Avolio, 2005). The three major constructs are *transformational*, *transactional* and *laissez-*

*faire* (the absence of leadership), respectively. (Figure 1).

Laissez-Faire Leadership Behavior refers to the complete avoidance of leading or making decisions or lack of response to subordinate performance (Sosik & Jung, 2010; Bass, 1990; Hinkin & Schriesheim, 2008). Typically, the leaders are relatively inattentive, ignorant, frequently absent, and lack of influence. They take action, give feedback and initiate transactions with colleagues only when it cannot be avoided. The leaders are perceived indifferent to follower actions and organizational outcomes and lack of proper reinforcement (Hinkin & Schriesheim, 2008).

Transactional leadership behaviors are aimed at monitoring, controlling and motivating employees to achieve the goals through rational or economic means (Sosik & Jung, 2010). Transactional leaders assist followers in becoming confident about meeting their role requirements (*Ibid*). To be effective, transactional leaders have to recognize the immediate needs of their followers and communicate to them how those needs will be met and what organizational rewards they will receive, contingent to their effective performance (*Ibid*).

According to Sosik and Jung (2010), the transactional leadership constructs comprises three dimensions representing what the leaders do to manage the followers' performance deviation: (i) Management-By-Exception Passive (MBE-P); (ii) Management-by-Exception Active (MBE-A); and (iii) Contingent

Rewards (CR). Leaders who are high in MBE-P will take actions and decisions only when problems occur and performance deviation becomes serious. For MBE-A, leaders proactively monitor subordinates' behavior and performance closely and give feedback in order to take corrective actions before the behavior creates serious difficulties. CR describes leaders who rewards subordinates in exchange for their accomplishment or punish those who did not meet up with the performance level (Sosik & Jung, 2010).

According to Bass (1999), transformational leaders stimulate followers to realize the important meaning of the tasks they are responsible for, motivate their high level of needs for growth and development, establish a

climate of mutual trust, raise their employees' interest to look beyond their own immediate self-interests for the good of the group or organization and achieve performance beyond expectations.

Transformational leadership is a multidimensional construct (Sosik & Jung, 2010). It involves the 5I's: (i) Idealized Influence behavior (IB) and (ii) attributes (IA) - the demonstration of high commitment, high moral standards to engage followers' focus on the mission vision of the organization (Burke, Sims, Lazzara & Salas, 2007); (iii) Inspirational Motivation (IM) - communication and expression of a compelling and clear vision, high standard, and high expectations in a simple way that provides enthusiasm and optimism, and instills a sense of pride that encourages follower connection to the higher collective purpose of the organization; (iv) Intellectual Stimulation (IS) - the challenge for innovative and creative intelligence and rationality of the follower to search for different perspectives to solve problems; and (v) Individualized Consideration (IC) - recognition of individual requirements (including those who may be neglected by the organization) for support, autonomy, responsibility, development and readiness to learn from both successes and failures (Sosik & Jung, 2010).

According to Bass and Avolio (1992) cited in Sosik and Jung (2010), an individual leader can display each of the full range of leadership behaviors and his/her leadership effectiveness is related to the relative frequency of each of these three styles (Sosik & Jung, 2010). Laissez-faire behavior should always be kept to a minimum as it has been consistently found to negatively correlate with leadership effectiveness (Judge & Piccolo, 2004; Sosik & Jung, 2010; Lowe et al., 1996). Utilizing only transactional leadership dimensions has been found to be ineffective in the long-term as it may not be able to motivate the followers to meet the desired goals of the organization (Sosik & Jung, 2010; Bass, 1996). Organizations can produce exceptional performance through effective leadership by encouraging all leaders to use transformational behaviors to augment active forms of transactional leadership and with minimal mounts of passive forms of transactional leadership and laissez-faire behaviors (*Ibid*).

#### - *Approaches and Delivery Mechanisms of Leadership Development Intervention*

Avolio (2005) suggests that effective distribution of leadership behaviors toward the FRLD unfolds over time. Organizational intervention that facilitates leadership development shall support the following three approaches: (i) *Knowing* - to enhance participants' developmental readiness; (ii) *Doing* - to give opportunity to apply knowledge learned in the context in which the person operates; and (iii) *Improving* - to support mechanism a peer's or coach's timely feedback on how well the person progress toward leadership development goal (Avolio, 2005).

*Knowing* - Individual's developmental readiness occurs when development intervention prepares and supports the acquisition of knowledge so that there is a change in the individual's mental model of how he/she views himself/herself (Avolio, 2005). Knowing is not only to know what an effective leadership model is but also an individual awareness of his/her leadership gaps as perceived by others and necessary skills to improve it (Avolio, 2005). Effective delivery mechanisms include training workshop and feedback counseling. Training programs enhance subordinates' organizational commitments and some of the organizational financial performance significantly (Barling, Weber & Kelloway, 1996). As Thach's (2002) research suggests, the combination of individual coaching and multi-rater feedback do increase leadership effectiveness (up to 60% according to direct report and peer post-survey feedback).

The relative roles of training and feedback counseling in transformational leadership development reveal that both training and feedback counseling are effective in enhancing subordinates' perceived transformational leadership behaviors (Kelloway, Barling and Helleur, 2000). But that the combination of training and feedback counseling did not result in enhanced transformational leadership (*Ibid*). Transformational leadership can be learned either through training workshops or feedback counseling (i.e. coaching and 360 feedback process).

*Doing & Improving (i.e. Learning)* - Leadership can be learned through workplace experiences from practice

(Marquardt, Leonard, Freedman, & Hill, 2009; Peters & Smith, 1998). Organizations can create the right environment for leadership to grow naturally by arranging the “safe environment for practice” where mistakes are not punished and experimentation can be encouraged (Peters & Smith, 1998). The delivery mechanism to support *Learning* from practice is through Action Research (Marquardt et al., 2009; Sagor, 2005; Peters & Smith, 1998).

Action research process can be pursued through four cyclical sequential stages. It starts with *Planning* or setting a vision or goals. The individual clarifies which leadership behavior he/she wants to improve at this stage. Then the individual proceeds with *Action* by articulating a detailed rationale for proceeding in a particular behavior based on his/her anticipating context and theory related to what has been learned during the training session prior to the on-the-job practice. Thirdly, the participants *Observe* by determining what data they need to collect to understand if the theory of action is as effective as expected and really observe what is happening as the action unfolds. The last stage of the cycle is *Reflection* on the data regarding the impact of the activity; whether it is as expected or there is a deviation and a need for planning informed action.

Learning refers to the process of making meaning out of one's experiences whereby knowledge is created through the transformation of experience so that one can act appropriately (Posner, 2009; Beard & Wilson, 2007). An individual may achieve in his/her learning journey new behavioral developments from experiences at three different levels, i.e., Level 1 (Single Loop Learning), which relates to “efficiency” or “doing things right”; Level 2 (Double Loop Learning), which has to do with “effectiveness” or “doing the right things”; and Level 3 (Triple Loop Learning), which pertains to meta-learning or “making sure the learning processes themselves are optimal” (Posner, 2009; Beard & Wilson, 2007; Kahane, 2004; Peters & Smith, 1998).

Learning level 1 is most suitable for management development since learning can take place in a fixed business context where standard and norms are established (Peters & Smith, 1998) and requires small adjustment of one's own behavior to achieve expected goals

based on what has or has not worked in the past. Argyris (2004) and Peters and Smith (1998) asserted that leadership learning in the normal workplace setting is context-dependent and requires at least Level 2 as it involves ambiguity, complexity, changing business contexts, and adaptation. Individual will only learn from examining one's assumption and belief that direct one's actions and learn why those actions work (Beard & Wilson, 2007). As Kahane (2004) suggested, people learn what to do at Level 2 as they become observers of themselves to deepen their insights and develop a big picture of what is going on and what the patterns are in relations to their beliefs and assumptions.

## **2. Theoretical and Conceptual Frameworks**

This study used an integrated multiple-solution approach of leadership development including behavioral assessment through multi-rater feedback, team coaching as well as external coaching by the researcher, training workshop for participants to acquire general knowledge of leadership, learning by doing through on-the-job practice of effective behaviors, cyclical self and group reflection and coaching for participants to enhance their self-awareness of their leadership profile. In the workshop, they learned the difference between “*managing*” and “*leading*” in a business context, to self-reflect and share their experience as well as learn from each other, and practice transformational leadership via role play and group activities.

In order to enhance transformational leadership, double-loop learning took place during the on-the-job practice of leadership development intervention. An action research design approach focusing on goal planning, action or experiencing the practice, self-reflection and group reflection for team coaching during the follow-up sessions was employed.

This study's main purpose is to employ pre- and post-test designs to examine the impact of the six-month Full Range Leadership Development Program (FR-LDP) on transformational and active transactional leadership behavior of the 31 middle managers at the middle management level of the company.

The proposition of the research is that the Full Range Leadership Development Program (FR-LDP) can be effective in enhancing

effective leadership (transformational leadership and active transactional leadership) and leadership outcome performance (leaders' effectiveness, satisfaction with leaders and extra effort). Both effective leadership and leadership outcome performance are the outcome variables of the study (Figure 1). The development intervention improves these outcome variables through an experiential learning process. Each participant learns the necessary knowledge required for on-the-job application. They reflect on what was done and new knowledge learned from the practice is fed back to enhance the repertoire of knowledge for the next cycle of practice and learning.

In order to assess the effectiveness of the FR-LDP intervention, this study tests the following hypotheses based on their impact on leadership behavior and outcomes

*H1: The full range leadership development intervention*

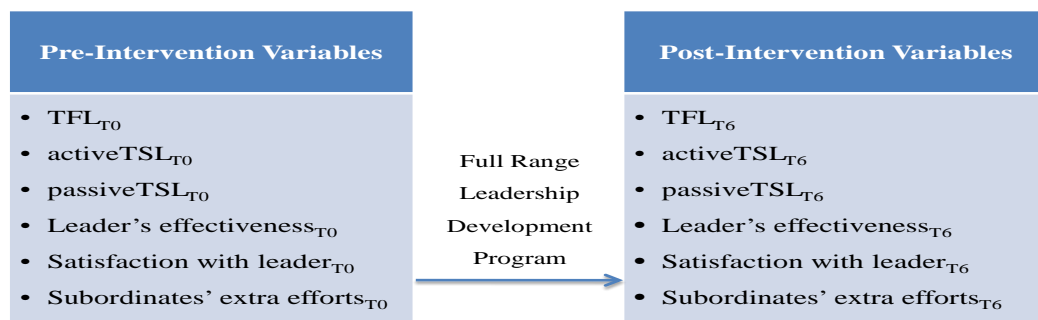
*enhances the participants' transformational leadership.*

*H2: The full range leadership development intervention enhances the active form of transactional leadership behavior of the participants (contingent rewards and active management-by-exception).*

*H3: There is no difference in the passive form of transactional leadership behavior (passive management-by-exception and laissez-faire) of the participants after completing the FR-LDP intervention.*

*H4: The full range leadership development intervention enhances the participants' leadership outcome performance, including leader's effectiveness, satisfaction with leaders and their subordinates' extra effort.*

**Figure 1** - Schematic diagram demonstrating pre- and post-intervention variables for hypothesis testing



Created by the author for this study

In this study, the leadership outcome performance includes leaders' perceived effectiveness, subordinates' extra efforts and satisfaction with leaders. If transformational leadership behavior has a positive relationship with the perception of leadership outcome performance, and the Full Range Leadership Development (FRLD) has a positive influence on a leader's transformational leadership behavior, then it is expected that the FRLD enhances the perception of leadership outcome performance

### 3. Research Methodology

The research uses pre- and post-tests design to make inferences about the mean difference between the pre- and post-ODI of the variables. It was designed to have a high statistical power of 0.8 to detect a medium effect size for a one-tailed test at the Type I error (  $\alpha$ ) less than conventional value of Cohen's  $d = 0.5$ , the researcher considers that an effect size of less than 0.5 is trivial and that the pre- and post-ODI variables differing by less than 0.5 are

*practical equivalence* (Brace, Kemp, & Snelgar, 2006). By using G\*Power 3, a priori power analysis then revealed that the total number of leaders required for the study was at least twenty-seven (Faul *et al.*, 2007). Non-probability *sampling design* was applied for the quantitative inquiry of the study.

A survey was used for data collection. It included a Multifactor Leadership Questionnaire (MLQ 5x Short; Bass & Avolio, 2004), which has shown to be a psychometrically sound instrument in terms of measuring the construct of transformational leadership, transactional leadership and the non-leadership (Sosik & Jung, 2010). Muenjohn and Armstrong (2008) examined the factor constructs of the MLQ 5X in 138 Thai samples. The results from a confirmatory factor analysis (CFA) reveal that the instrument has an adequate construct validity to capture the similar nine factors of the full range leadership constructs.

The MLQ 5X Short contains forty-five items describing all the variables in the hypotheses of the study i.e. twenty items for transformational leadership scale, four items for contingent rewards, active management-by-exceptions, passive management-by-exceptions and laissez-faire scales each, four items for leadership effectiveness scale, two items for satisfaction with leaders, and three items for extra effort scale.

The respondents were asked to indicate on a 5-point Likert scale the extent to which the items describe the behavior of the participants based on their perception of how frequently each statement fit the participants ranging from 0 (not at all); 1 (once in a while); 2 (sometimes); 3 (fairly often); to 4 (frequently, if not always).

The researcher obtained official permission from the MLQ developer to revise the Thai version of the instrument as some of the questions were difficult to understand, for example the double-negative phrase of question number 17 of the instrument. Despite an ongoing academic debate on the issue, the researcher revised the question in the Thai version to replace it with a simple phrase of the same meaning. In order to improve the accuracy of the responses and minimize researcher bias, the translation process was arranged using back-translation method by a doctoral candidate not involved in the study (Steane *et al.*, 2003). A Senior Manager of the

company, fluent in both Thai and English, was appointed to validate the translated version and identify any deviations between the original and translated versions. Any discrepancy was discussed to ensure the correctness and make sense to Thai respondents.

Ten copies of the Thai version of the MLQ 5X Short were distributed to ten middle managers who did not participate in the FR-LDP intervention. Reliability of the MLQ 5X Short was evaluated by assessing the consistency of items representing each dimension of the full range leadership. The study follows the rule of thumb that a scale should have a minimum Cronbach's alpha value of 0.7 (Hair, Black, Babin & Anderson, 2010; Brace, Kemp & Snelgar, 2006). Ho (2006) suggested that the item-to-total correlations of those exceeds 0.33 shall be used as it indicates that approximately at least 10% of the variance in the scale is accounted for by that item (Ho, 2006, p. 243). Following the statistical process of weak item deletion of these scales, it improved the Cronbach's alpha coefficients of all leadership scales well above 0.80 and item-to-total correlation of 0.35 or greater (Table 1). One exception was the Cronbach's alpha of the two-item Satisfaction with Leader (SAT) scale at 0.163.

In order to strike a balance between improving internal consistency and maintaining the content validity of the scales, three summated scales were formed based on the theoretical ground asserted by Sosik and Jung (2010). First, Leadership performance (LPP) was a summated scale for Leadership Effectiveness (EFF), Satisfaction with Leaders (SAT), and Extra Efforts (EE). Second, Active Transactional Leadership (TSL) was a scale for Contingent Rewards (CR) and Active Management-by-exception (MBE-A). Thirdly, Passive Transactional Leadership (p-TSL) combined Passive Management-by-exception (MBE-P) and Laissez-faire (LF). They improved the Cronbach's alphas to exceed 0.8 as well as maintain the content validity of the scales (see Table 1, Appendix One). This indicated that the revised Thai translated version of the MLQ 5X Short was highly reliable and valid

A total population of thirty-four middle managers from the eleven divisions of the furniture company, who matched with the following three criteria, voluntarily

participated in the study: (1) They were head of a department or a unit equivalent to department of the eleven divisions of the furniture company; (2) They had been working in their positions for at least one year, and (3) They must have at least 6 informed coworkers (either peers or subordinates) who had worked with the participants for at least six month prior to the study.

Overall thirty-one middle managers completed the six-month development program in June 2010. The participants were quite senior in terms of tenure in the company (See Table 2, Appendix Two). A majority (22 of 31 [71%]) of the participants were female having the age range between 36 – 52 years (a mean of 44.3 years). These participants were quite senior in terms of tenure in the company (i.e. 68% of the participants have been working in the company for over 10 years).

The participants were asked to complete the MLQ 5X Short prior to the start of the FR-LDP program in December 2009 (i.e. pre-ODI) and again at the last follow-up sessions of the program in Jun 2010 (i.e. post-ODI). They were also asked to administer the 360-degree feedback assessment of the MLQ 5x Short for its completion within one week. These surveys were administered manually using hard copies and individually returned to the researcher in sealed envelopes for both the pre- and post-ODI to ensure confidentiality.

#### **4. Analysis and Results**

The pre- and post-ODI data was Multisource feedback data collected from the participants, subordinates, peers, supervisors and was entered into SPSS for data analysis separately for each group of respondents and also analyzed as “others” (including subordinates, peers and supervisors) to also compare participants’ self-perception with the rest of the respondents. Descriptive statistics as well as the inter-correlations of all variables for both pre- and post ODI intervention were assessed to test the sufficiency of data homogeneity for the hypothesis testing.

Reliability of internal consistency using the Cronbach’s alpha at least 0.7 and item-to-total correlations was used in combination for testing the reliability of the instrument of the study. *Paired samples t-tests* were employed to test the hypotheses. The effect sizes were also manually calculated and reported to

determine if the power of the statistical analyses of the variables were useful.

As Table 3 shows (see Appendix Three), at pre-ODI, the highest aggregate mean value [2.82 for active management-by-exception (MBE-A)] indicates that the participants are perceived as highly active with respect to monitoring performance very closely. Their focus is on mistakes, complaints, failures and deviations from standards. They keep the systems in check all the time and take corrective action often before or soon after a problem arises.

The aggregate mean of 2.67 for transformational leadership (TFL) explains the perception about team leadership style. The participants are not only concerned with monitoring work performance for errors and making sure they know if and when things go wrong but also consider their personal feelings before acting.

The mean value of 2.65 for contingent reward (CR) shows that the participants try to obtain consent from subordinates on what needs to be done and what payoffs will be for the people doing it. Followers feel that the participants always give them positive feedback when they perform well and alert them when their performance is not up to the agreed target. At pre-ODI, the summated score for action transactional leadership (aTSL) (2.71), which is higher than the mean score for transformational leadership (TFL) (2.67), indicates that the participants are more actively managing the followers’ performance than leading them to performance beyond expectation.

The aggregate mean of 1.51 for passive management-by-exception (MBE-P) indicates that sometimes the participants wait for things to go wrong before taking action. The mean for laissez-faire leadership (LL) (1.20) shows that they are sometimes perceived as not making decisions, solving problems or failing to follow up. And the mean value of 2.7 for leadership outcome performance (LPP) signifies that they perceive the participants’ leadership performance as rather favorable. The participants are perceived to be leading effectively. Their followers are fairly often satisfied with the participants and willing to give extra effort.

The data also reveals that after the intervention, there was a slight enhancement



of transformational, active transactional leadership, and leadership performance whereas passive transactional leadership was slightly lower. In order to determine whether any increase or decrease of these scales was significantly different from the pre-ODI level, a confidential interval approach and the effect size were employed to make statistical inference. The correlation matrix of the pre- and post-ODI variables determines whether the data sets constitute homogeneous sets of variables with expected correlations appropriate for further hypothesis testing (Hair et al, 2010).

As Table 4 shows (see Appendix Four), as expected, the transformational leadership variable was positively related to active transactional leadership (including contingent rewards and active transactional leadership) and leadership performance (including leaders' effectiveness, satisfaction with leaders, and extra efforts). In addition, transformational leadership, active transactional leadership, and leadership performance were related negatively with passive transactional leadership, passive management-by-exception, and laissez-faire. Prior to the ODI, fifty-four out of fifty-five correlations (98%) were significant at the 0.01 level. A similar significant level was found post-ODI in thirty-five of the fifty-five correlations (64%). Both results provided an adequate basis for proceeding to hypothesis testing on both an overall basis and for each variable (Hair et al, 2010, p. 129).

#### *- Effects on Transformational Leadership*

The transformational leadership behaviors of the participants after completing the six-month FR-LDP intervention were significantly higher than the pre-ODI ones ( $t = 3.589$ ,  $df = 234$ ,  $p < 0.000025$ , one-tailed). The data suggests that hypothesis H1 can be accepted. The FR-LDP intervention enhanced transformational leadership of the middle managers. Six months after completing the intervention, peers' ratings and ratings from the participants themselves on their transformational leadership increased significantly after the participants completed the intervention.

#### *- Effects on Active Transactional Leadership*

There was a small improvement in the participants' active transactional leadership ( $df = 234$ ,  $p = 0.01$ , one-tailed,  $d = 0.22$ ). The intervention improved leaders'

behavior after the FR-LDP intervention. The effect was statistically significant ( $t = 3.407$ ,  $df = 234$ ,  $p = 0.001$ , one-tailed,  $d = 0.31$ ). The improvement of contingent rewards contributed to the improvement of active transactional leadership ( $t = 4.167$ ,  $df = 234$ ,  $p = 0.00025$ , one-tailed,  $d = 0.38$ ). While all raters perceived that the participants improved with respect to contingent rewards, only peers and supervisors found that the improvement was statistically significant ( $t = 3.634$ ,  $df = 88$ ,  $p < 0.0001$ , one-tailed,  $d = 0.54$ ; and  $t = 2.152$ ,  $df = 26$ ,  $p = 0.0204$ , one-tailed,  $d = 0.59$  respectively).

The data suggests that hypothesis H2 can be accepted. The FR-LDP intervention enhanced the active transactional leadership of the middle managers six months after completing the intervention. In particular, their Contingent Rewards improved as perceived by all raters but only peers and supervisors perceived it to improve significantly.

#### *- Effects on Passive Transformational Leadership*

The FR-LDP intervention did raise the participants' attentions on the ineffective leadership but leave it for individual to minimize the behavior. It is expected that there are no difference of passive forms of transactional leadership after completing the intervention. Findings from the statistical analysis are shown in Figure 8, 9 and 10. In summary, the FR-LDP has no significant effect on passive transactional leadership ( $t = 0.626$ ,  $df = 234$ ,  $p = 0.266$ , one-tailed,  $d = 0.06$ ); and either on passive management-by-exception ( $t = 0.687$ ,  $df = 234$ ,  $p = 0.2465$ , one-tailed,  $d = 0.06$ ) or Laissez-faire ( $t = 0.337$ ,  $df = 234$ ,  $p = 0.2685$ , one-tailed,  $d = 0$ ).

#### *- Effects on Leaders' Performance*

Leadership perceived performance (LPP) of the study includes the participants' perceived effectiveness (EFF), satisfaction with the participants (SAT) and perceived extra efforts (EE). The FR-LDP intervention was expected to improve the leadership performance of the participants after they completed the six-month intervention. The findings from the statistical analysis reveal that there was a very small but significant enhancement of overall leadership perceived performance of the participants after completing the FR-LDP intervention ( $t = 2.34$ , effectiveness ( $t = 2.696$ ,  $df = 234$ ,  $p = 0.004$ , one-tailed,  $d = 0.25$ ) and subordinates' extra

efforts ( $t = 2.603$ ,  $df = 234$ ,  $p = 0.005$ , one tailed,  $d = 0.24$ ). However, there was no significant effect of the FR-LDP on satisfaction with leaders ( $t = 1.225$ ,  $df = 26$ ,  $p = 0.1158$ , one-tailed,  $d = 0.17$ ). In addition, the improvement of overall leadership performance was found significantly when it was perceived by peers ( $t = 2.832$ ,  $df = 88$ ,  $p = 0.003$ , one-tailed,  $d = 0.42$ ).

In summary, the FR-LDP intervention enhanced both the transformational and active transactional leadership in particular the contingent rewards. It also improves overall leadership performance such that it enhances leadership effectiveness and extra effort.

## 5. Discussion and recommendations

This study is the first research on the full range leadership development of middle managers in private organization using the revised Thai version of the Multifactor Leadership Questionnaire (MLQ 5X Short; Bass & Avolio, 2004). It contributes to leadership research in several ways. First, as the results of the study suggest, the six-month FR-LDP is an effective leadership development intervention. The combination of training workshop and the 360-degree feedback plus peer-coaching has been effective in enhancing the effective leadership of middle managers, both the transformational and active transactional leadership behaviors.

The result is consistent with a substantial body of findings on transformational leadership development that suggests either training or feedback coaching alone or both as effective approach (Thach 2002, Barling, Weber & Kelloway, 1996; Kelloway, Barling & Helleur, 2000). The participants attending the development program could rely on the program's effectiveness in that it prepared them for effective leadership behavior. The training sessions of the development program provided participants with relevant leadership theories (i.e. the full range leadership theory) together with some illustrative examples of its practical aspects to facilitate a general understanding between effective "leading" and "managing" behaviors. The two-month field-practice sessions complemented the training sessions in that the participants learned from their practice and shared the experience at group reflections following the training sessions.

Second, the result shows that enhancement

of both effective leadership and leadership performance were perceived by all raters but only found significant when perceived by peers. The findings may be explained by the fact that a majority (23 out of 31 [74%]) of the participants had at least one peer rater attending this FR-LDP program. This gave a significant number of peer raters an increased opportunities and insightful privilege to learn and appreciate the participants' intentions to implement effective leadership. Their interactions during peer coaching and group reflective sessions may have contributed to the positive impression and influenced their ratings at the end of the last follow-up sessions.

In order to understand why the enhancement of some effective leadership behaviors and leadership performance as perceived by supervisors and subordinates were not significantly higher than the pre-ODI level, a qualitative inquiry was conducted to explore the leadership phenomenon of how the participants learn and develop their effective leadership behavior and what influence their practice in their normal workplace setting during the six-months of FR-LDP intervention. The results will be reported in a subsequent paper.

Third, the study demonstrates a successful and practical application of the Action Research framework into the program, designed to promote double-loop and action learning in an organization. The researcher obtained advanced support from senior management of the case company to establish "a safe environment" for the participants to set leadership development goals, take actions, and subsequently learn what worked well and what did not work so well. They were empowered to adopt reflective process to confront their own views and learn how to invite others to do so.

The result is consistent with the endorsements of leadership's double-loop learning by Argyris (2004), Posner, 2009, Beard and Wilson (2007), Peters and Smith (1998), and Kahane (2004). It shows that leadership development goals must be separated from but have to support the achievement of individual's performance goals. The positive result from promoting individual participants' learning of their own actions is consistent with the Action Learning theory for developing leadership in

organizations, endorsed by Marquardt et al. (2009), Day (2001), and Peters and Smith (1998).

There are limitations to this study that must be addressed in future research. First, the sample was small and confined to middle managers. Therefore, further research should be done to confirm the results. In order to produce more generalizable results, similar studies with a larger number of participants at middle management and senior leadership levels should be conducted to uncover the similarities and differences of the impact of the intervention. Second, the participants were purposive sampling although participation was voluntary.

In summary, this study shows the positive impact of the effective leadership development of middle managers in a private company in Thailand. It indicates that participants who attended the development program could rely on the program's effectiveness in that it prepared them for effective leadership behavior. The Full Range Leadership Development offers a useful framework for assessing the extent to which a particular middle manager is displaying transformational leadership and developing effective leadership behavior after the intervention.

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## Appendix One

**Table 1 - Reliability analysis of the MLQ 5X Short**

Leadership Scale	Cronbach's Alpha		Final Items Retained
	Total Items *	If Items Deleted *	
Transformational (TFL)	0.879 (20)	0.899 (13)	q 2, 6, 8, 10, 13, 14, 15, 18, 21, 25, 26, 30, 31
Active Transactional (aTSL)	0.831 (8)	0.871 (6)	q 1, 11, 16, 22, 27, 35
• CR	0.845 (4)	0.845 (4)	q 1, 11, 16, 35
• MBE-A	0.423 (4)	0.800 (2)	q 22, 27
Passive Transactional (pTSL)	0.782 (8)	0.832 (5)	q 3, 5, 7, 12, 20
• MBE-P	0.738 (4)	0.926 (2)	q 12, 20
• Laissez-faire (LP)	0.623 (4)	0.899 (2)	q 5, 7
Leadership Performance (LPP)	0.872 (9)	0.890 (6)	q 37, 38, 39, 40, 42, 44
• Effectiveness (EFF)	0.687 (4)	0.693 (3)	q 37, 40, 45
• Satisfaction (SAT)	0.163 (2)	0.163 (2)	q 38, 41
• Extra Efforts (EE)	0.787 (3)	0.930 (2)	q 42, 44

\* number in the parentheses was number of items for the scale

## Appendix Two

**Table 2 - Summary of the participants' demographics, N = 31**

Age	Male	Female	Total	Age-wise
34 - 40	7	4	11	35%
41 - 45	2	7	9	29%
46 - 50	0	10	10	32%
> 50	0	1	1	3%
Total	9	22	31	100%
Male : Female	29%	71%		
Mean (years)	39.8	44.3		
Tenure	M	F	Total	Tenure-wise
1 - 5	3	3	6	19%
6 - 10	2	2	4	13%
11 - 15	3	8	11	35%
16 - 20	1	2	3	10%
> 20	0	7	7	23%

## Appendix Three

**Table 3 - Descriptive statistics of research variables comparing Pre-ODI and Post-ODI**

Leadership Scale	Pre-ODI		Post-ODI	
	Mean	SD	Mean	SD
Transformational (TFL)	2.67	.53	2.83	.54
Active Transactional (aTSL)	2.71	.60	2.87	.60
• CR	2.65	.64	2.86	.64
• MBE-A	2.82	.74	2.89	.71
Passive Transactional (pTSL)	1.39	.63	1.36	.68
• MBE-P	1.51	.67	1.47	.75
• Laissez-faire (LP)	1.20	.75	1.19	.75
Leadership Performance (LPP)	2.70	.65	2.82	.62
• Effectiveness (EFF)	2.84	.72	2.99	.63
• Satisfaction (SAT)	2.80	.69	2.89	.68
• Extra Efforts (EE)	2.67	.83	2.84	.75

## Appendix Four

**Table 4 - Correlations matrix among variables**

	1	2	3	4	5	6	7	8	9	10	11	No.**
Transformational (TFL)	1	.197**	.189**	.158**	-.182**	-.191**	-.124*	.212**	.182**	.180**	.207**	9
Active Transactional (aTSL)	.766**	1	.265**	.188**	-.210**	-.212**	-.157**	.197**	.185**	.165**	.181**	9
• CR	.655**	.938**	1	.154**	-.208**	-.189**	-.187**	.228**	.225**	.184**	.218**	8
• MBE-A	.720**	.799**	.542**	1	-.149*	-.187**	-.057	.085	.059	.084	.064	1
Passive Transactional (pTSL)	-.288**	-.286**	-.190**	-.362**	1	.263**	.230**	-.088	-.079	-.084	-.085	2
• MBE-P	-.233**	-.230**	-.142*	-.312**	.918**	1	.112*	-.069	-.029	-.044	-.064	0
• Laissez-faire (LP)	-.284**	-.284**	-.204**	-.334**	.854**	.578**	1	-.091	-.125*	-.117*	-.092	0
Leadership Performance (LPP)	.790**	.726**	.650**	.635**	-.242**	-.170**	-.278**	1	.267**	.240**	.223**	3
• Effectiveness (EFF)	.735**	.660**	.565**	.620**	-.232**	-.160**	-.271**	.906**	1	.180**	.152**	2
• Satisfaction (SAT)	.711**	.600**	.508**	.573**	-.324**	-.245**	-.343**	.810**	.728**	1	.269**	1
• Extra Efforts (EE)	.665**	.611**	.563**	.506**	-.191**	-.152**	-.202**	.870**	.689**	.643**	1	
No. of Correlations at $p < 0.01$	10	9	7	7	6	5	4	3	2	1		

Note: Lower part of the diagonal are correlations before the ODI intervention and the upper part are correlations after completing the six-month ODI intervention. (\*  $p < 0.05$  \*\*  $p < 0.01$ )