

MENTORING AS AN INTERVENTION TO IMPROVE ANALYTICAL THINKING COMPETENCE IN LEADERSHIP DEVELOPMENT PROGRAM PT. X

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Abstract

Mentoring is an interaction process in which there is a transfer of knowledge between a mentor and a mentee based on trust, mutual respect, and the mentor provides support, encouragement, guidance and enthusiasm that aims to shape the growth, development, competence of the mentee in a positive direction. This article discusses the development of analytical thinking competencies in an organization or company. One approach that can be taken to improve analytical thinking competency is mentoring. By using a quasi-experimental method before and after studies design it was found that mentoring activities had a positive impact on previous analytical thinking competencies and could improve organizational or company performance. Thus mentoring can be used effectively for the development of analytical thinking competencies in order to support the organization to determine certain position positions in PT. X

Keywords: Mentoring, Analytical Thinking, Competency

Introduction

With the growing world of business and industry, attention to aspects of labor or the human dimension as a resource becomes even greater. These resources need to get appropriate and appropriate attention so that the potential possessed as a resource can be optimally increased. Utilization of the potential of human resources requires a good planning, consistent implementation, and continuous control, so that the desired goals can be achieved efficiently and effectively. It also encourages every company to be able to face every challenge, both from internal and external, the company is required to continue to improve the effectiveness of the organization. Robertson, Calinan, and Bartram (2002) organizational effectiveness can be assessed when employees strive to achieve organizational goals. The assessment is

distinguished between primary and secondary from the goals of the organization. Meanwhile, according to Robbins (1994) Organizational effectiveness is defined as the extent to which organizations realize their goals. Therefore the effectiveness of the organization is very important for the success of the organization to achieve its goals with the stability, balance and survival of the functioning of the organization itself.

Effectiveness of PT. X in conducting organizational effectiveness is based on the complexity of existing business fields in the company. The extent of the type of business also makes a large organizational structure. With the increasingly large organizational structure, more and more working groups are running different business programs and processes. On this basis the effectiveness of each individual also needs to be considered so that organizational goals can be achieved effectively and efficiently. In essence, the process of managing individual behavior is the need to direct behavior towards the production of results that can build towards achieving organizational goals (Robertson, et al., 2002). So through the Talent Development Division launched the Leadership Development Program (LDP) to improve the competence of its employees. Competence has become an integral part of modern management throughout the world. To manage people effectively, managers need to accurately assess each individual's strengths, development needs, and potential contributions (Robertson et al., 2002).

Competence has many meanings in psychology and in this study the focus is on Analytical Thinking competence. In the Competency Directory of PT. X (2011), analytical thinking competence or analytical thinking is the ability to understand / recognize the situation / problem which is shown by identifying information, seeing the relationship of one information with other information as a basis for determining existing problems and developing alternative solutions. Analysis can be done either by breaking down one situation logically into smaller pieces, or tracing the implications of the problem or situation gradually.

The concept of Leadership Development Program is not only based on training in selection but more development modules are based on the concepts of learning from others and learning on the job. This concept is in line with the implementation of the talent management system, which is a formal development program with coaching, mentoring and counseling listed in the PT Long Term Corporate Plan. X 2015-2019. This concept is intended to execute one of the plans in the 2015-2019 human resources roadmap on the Competency pillar, which is an evaluation and improvement plan for competency and career development systems, and succession management.

To improve these competencies, in this study using mentoring techniques. According to Lombardo and Eichinger (1996), the percentage of successful HR program development is

10% learning format, 20% learning from others and 70% learning on the job. So to increase the percentage of human resource development success, then a development program is designed that is not only based on education and training but more development modules based on the concept of learning from others and learning on the job. In research conducted by Noe (1988) this became formal as part of the career development of junior and professional managers. The intense interpersonal exchange that characterizes mentoring can result in the appreciation of students, mentors, and organizations. The benefits for students with a mentor can be considered as a developmental task in the beginning of a career. In some studies, the benefits of mentoring related to rewards given to students include faster promotion, higher compensation, and accelerated career mobility, as well as reducing role stress and role conflict (Chao, 1992; Wilson & Elmann, 1990). In addition to providing benefits to their students, mentoring can also provide benefits for mentors, such as the creativity and energy of students as well as student loyalty and organizational recognition given by mentors for their abilities as teachers and advisors (Kram, 2007)

Mentoring organizations can also provide benefits. In previous studies, the benefits of mentoring can be related to increased employee productivity, organizational commitment and lower turnover rates (Silverhart, 1994, Aryee, 1996, Scandura & Viator, 1994). Whereas from an organizational perspective, mentoring has been widely accepted as a career key to developing managerial talent and also as a tool for educating new employees (Ragins & Scandura, 1994).

So based on the results of the research that has been stated above, researchers are interested in knowing the differences in the effectiveness of mentoring to improve analytical thinking competency in the Leadership Development Program of PT X.

Research methods

The approach used in this research is a quantitative approach. The design used in this study uses a quasi-experimental research design, namely: O X O design (one group pretest-posttest design) / before and after studies design. The subjects in this study were the top managers who had analytical thinking competency gaps based on the previous center assessment, totaling 25 people.

Measurement (O_1) → Intervention (X) → Measurement (O_2)

Figure 1. Design the one group pretest-posttest design

In this study data collection methods were applied to determine the effectiveness of mentoring to improve Analytical Thinking competence in the Leadership Development Program at PT. X by using a monitoring book (from monitoring) in the form of a questionnaire. Behavioral indicators used in making the questionnaire based on the competency directory of PT. X. This questionnaire consists of 14 items. The questionnaire used uses a Likert scale model, with five alternative answers with a score range of 0-4 to indicate the level of suitability of the subject to the statement, with choices: Never (0), Rarely (1), Sometimes (2), Often (3) and Very Often (4). A summary of the blueprint for measuring Analytical Thinking competence can be seen in table 1.

Table 1. Blueprint of Analytical Thinking Competency Scale

No	Sub dimensions	No Item	n
1.	The description of the problem is simple (individual or individual level)	1,2,3	3
2.	Identification of problem causing factors (team level or work group)	4,5,6,7,8,9	6
3.	Identification of internal and external factors inhibiting performance (work unit level)	10,11,12,13,14	5
Total		14	14

Intervention

Before being given a treatment (mentoring), the group of employees that were subjected to was measured in advance using a scale (pretest). Then the treatment in the form of mentoring is imposed. Furthermore, after one month the measurements were repeated using a scale (posttest). In this study the intervention was carried out as many as two meetings. Each meeting is held for a period of one month. Every meeting was measured again (posttest) by giving the same scale.

Results and Discussion

In this research the results of the cronbach alpha reliability were 0.953. These results indicate that the item being retained is an item whose correlation level score shows above 0.30, it can be said that the whole item has good item discrimination.

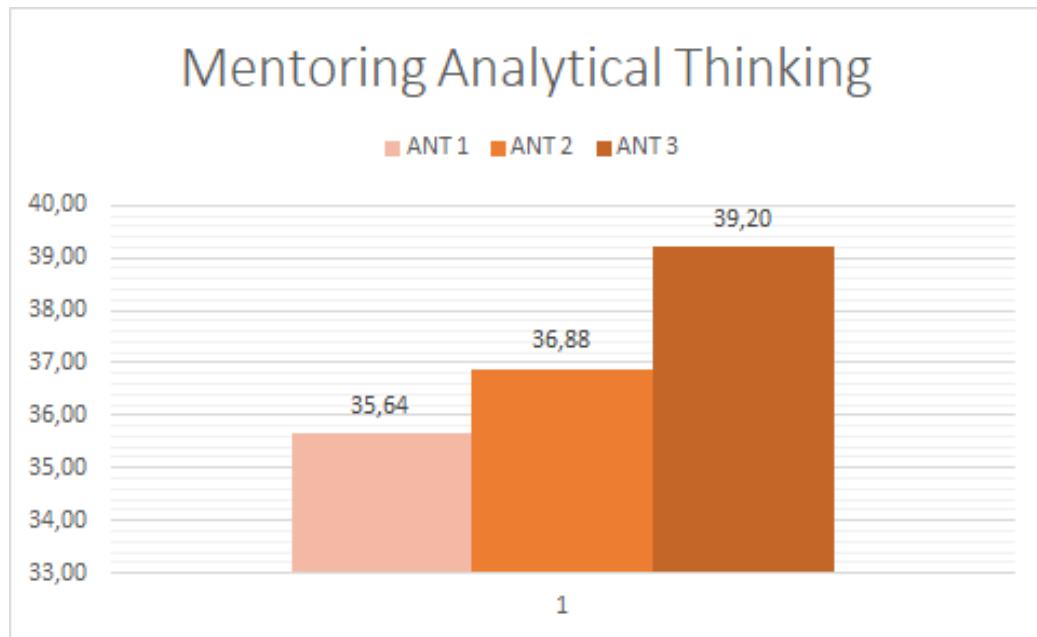
To see the effectiveness of mentoring is done by using non-parametric statistical tests of different tests that compare data analytical thinking competence before and after mentoring. The non parametric difference test technique that is suitable with this research is the Friedman non parametric difference test. Can be seen in **Table 2**. The use of non-parametric difference test techniques was carried out because the number of subjects was small ($N < 30$) so it did not meet the requirements in the use of the parametric difference test. Based on the results of the above hypothesis test can be seen the value of Asymp, which is as follows: Sig for pretest with posttest is equal to 0,000 or smaller than < 0.05 . This means that H_a becomes accepted. That is, there are differences in analytical thinking competence between pretest and posttest. The results of data analysis using the non parametric friedman difference test can be seen in the following table:

Table 2. Hypothesis Test Results

N	25
Chi-Square	17.293
df	2
Asymp. Sig.	.000

a. Friedman Test

The results of differences in the level of effectiveness of mentoring can be seen from the comparison of the mean values of analytical thinking competence before and after mentoring. The difference in mean analytical thinking before and after mentoring is illustrated in the form of the following bar graph:



Note: ANT 1 (Pretest),
 ANT 2 (Posttest),
 ANT 3 (Posttest).

Graph 1. Effectiveness of Analytical Thinking Mentoring

Seen in the bar graph above seen an increase in the level of effectiveness of Analytical Thinking mentoring starting from the pretest (first meeting) has a total score of 35.64, posttest has a total score of 36.88 (second meeting), and posttest has a total score of 39.20 (meeting third). The higher the score generated, it means the more functioning analytical thinking competency mentoring program conducted on managers of PT. X.

The analysis results are also strengthened by looking at the effect size. Effect size is a quantitative measure of the magnitude of the experimental effect. The greater the effect size, the stronger the relationship between the two variables. The effect size calculation is based on the cohen's method d. The effect size obtained is 0.9965 which means that mentoring has a large effect on improving analytical thinking competence. Effect size calculation is done using the Statistics Calculator application. The results can be seen in the table:

Table 3. Cohen's Effect Size

Cohen's d	24,041630
Effect Size (r)	0,9965676

Based on the results of demographic data the Leadership Development Program (LDP) program focuses on developing structural position competencies. Where the Leadership Development Program was chosen based on an Assessment Center that had been previously conducted by PT. X. Based on the results of the assessment center previously obtained as many as 25 top managers who have analytical thinking competency gaps. The top managers are from PT. X Distribution of West Java, Distribution of South and West Sulawesi.

Table 3. Demographic Data Results

Demographic Data	n	%
Gender		
Men	22 people	88%
Woman	3 people	12%
Position		
Manager	10 people	40%
Assistant Manager	12 people	48%
Supervisor	3 people	12%
Distribution Unit Office		
PT. X Distribution of West Java	14 people	56%
PT. X Distribution of South Sulawesi	11 people	44%

Conclusions and Recommendations

From the results of preliminary research that shows that in the Leadership Development Program activities there are 25 people who have analytical thinking competency gaps, so that they need to improve their level of competence by means of mentoring.

The problem of analytical thinking competency gaps is considered to affect the performance of employees, especially upper managers who require more complicated analytical thinking competencies so that the gap can hamper the achievement of organizational targets to the maximum. So to improve analytical thinking competence, it is needed a design of a development program that is not only based on education and training but more development modules based on the concept of learning from others and learning on the job.

With this gap, PT. X made a mentoring program compiled based on PT. The X. In addition, another test, namely a different test analysis has also been carried out to determine the differences in analytical thinking competencies between before being given mentoring and after being given mentoring. The analysis found that there was a significant difference between analytical thinking competence before being mentored and after being mentored. The hypothesis test which has a significance of 0,000 has also confirmed the H_a hypothesis which means that there are differences in analytical thinking competence after being given a mentoring program and strengthened by the results of an effect size of 0.9965, which means that mentoring has a large effect on increasing analytical thinking competence.

Suggestions for further research if interested in conducting research on the same topic, namely by linking with other competencies that need improvement in addition to analytical thinking competencies in order to improve employee performance.

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