

# PERSONNEL RECRUITMENT AFFECTING EMPLOYEE'S PERFORMANCE EFFICIENCY IN DEPARTMENT OF THE ENERGY DEVELOPMENT AND PROMOTION

**Benya Whangmahaporn\*, Nathayu Wantayakul\*\*, Thitiwut Srimanop\*\*\*  
& Oraphan Decha\*\*\*\***

*\* \*\*'\*\*\*\*'\*\*\*\*\* Suan Sunandha Rajabhat University, 1-U-Thong Nok, Dusit, Bangkok, Thailand,*

*E-mail: \*benya.wh@ssru.ac.th, \*\*nathayu.wa@ssru.ac.th, \*\*\* thitiwut.sr@ssru.ac.th, \*\*\*\* oraphan.de@ssru.ac.th*

## ABSTRACT

Abstract— Study of personnel recruitment that affects employee's performance efficiency in the Department of Energy Development and Promotion have several purposes. Purposes of this research are to study the employee's performance efficiency and to study the recruitment effect on employee's performance in the Department of Energy Development and Promotion. The sample consisted of 114 participants in the office of the secretary of the department and analyzing the data by using the mean, standard deviation and Pearson correlation coefficient. Findings revealed that employees of the Department of Energy Development and Promotion, numbering 114 people, mostly male, aged 26-30 years old, holding a bachelor's degree, have an average income of 15,000-20,000 baht and work experience of 2-3 years. Human resource planning, job specification, recruitment method and personnel selection of personnel recruitment found high levels. All four employee's performance efficiency factors, the quality of work, quantity of work, time and cost, were at a high level. The correlation between the personnel recruitment effect on the employee's performance was found to be no more than 0.80 that means no multicollinearity. The regression model of the personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion at 66.6 percent and there was a standard error in forecasting equal to plus-minus 0.348.

Keywords— Employee Performance, Performance Efficiency, Personnel Recruitment

## INTRODUCTION

Personnel recruitment is one of the most important processes in human resource management. Recruiting people to join an organization may seem easy for some organizations, but modern organizations can seem difficult and complicated. It was because if the organization makes a mistake in recruiting, that person will cause damage to the organization. On the other hand, if the organization can choose qualified personnel that are suitable for the job, that personnel will create value for the organization. It can be concluded that personnel recruitment is the process of motivating people from different sources to join the organization through specified methods and procedures. Also, selection is the process of selecting job candidates who meet the specified criteria to work in different positions in the organization. Currently, the conditions of competition in the labor market are increasing, and there is more progress in modern technology. Theories and principles of personnel recruitment and selection may change or be modified to suit the competition in the digital age for the survival of each organization (Vehama, S., 2016). This made the researcher interested in studying the personnel recruitment effect on employee's performance efficiency. Concepts and theories have been used as guidelines for the study of personnel recruitment that affect the employee's performance, whether in terms of the quality of work, the quantity of work, the time, or the cost. The findings will be extremely useful as a guideline for planning and developing work. This will lead to the improvement of standards in various areas that affect the employee's performance in the future. There are several research questions in this study as: 1. What level is the employee's performance efficiency in the Department of Energy Development and Promotion? and 2. How does personnel recruitment affect the employee's performance efficiency in the Department of Energy Development and Promotion?

## LITERATURE REVIEWS

### 1. Personnel recruitment

Personnel recruitment means the process of recruiting suitable external personnel to fill our organization's roles to enable the organization to continue its business or achieve its objectives. Recruitment is often for recruiting personnel to work within the vacant position because personnel within the organization are promoted or resigned the establishment of new divisions within the organization. An effective recruitment process first requires knowing the details of the job position to be recruited, the skills of the candidate whether they are suitable or not, the working environment, and the specific qualifications of that job position. The main recruitment method is for people who want to apply to walk in and apply within the organization by advertising through various media, notifying individuals through educational institutions, informing through professional societies, notifying through the Employment Center, and approaching individuals from other organizations.

The researcher used the concept of Werther and Davis (1996) as a guideline for studying the personnel recruitment effect on employee's performance efficiency in the Department of Energy Development and Promotion, consisting of 4 aspects:

1. Human resource planning refers to the process of determining directions, developing strategic plans, and analyzing the human resource needs of the organization now and in the future to achieve the organization's goals.
2. Job specification means the scope of duties and responsibilities of a job position in the organization, including specifying the necessary qualifications of that job position.
3. Determination of recruitment means the process of selecting competent and suitable personnel to work in the positions that the organization wants.
4. Personnel selection means determining selection criteria, interviewing, evaluation, selection, examination of educational background, reference check, criminal background check, physical examination, welfare, making offers and entering employment contracts.

### 2. Employee's performance efficiency

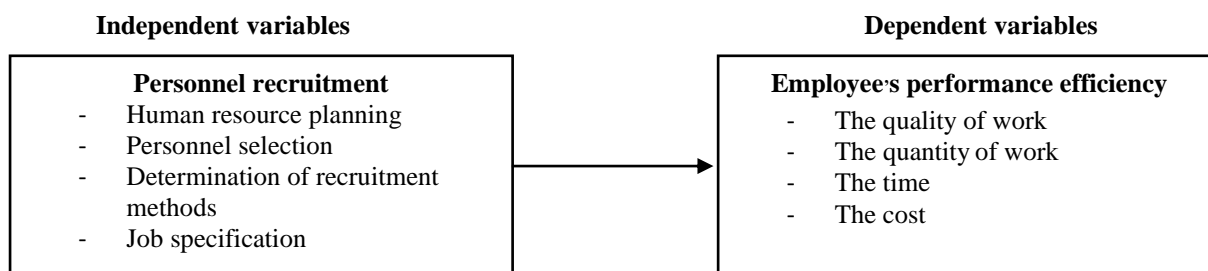
Employee's performance refers to the tasks, functions that are assigned in conjunction with social position. Which person or group of people hold any position, they must work in accordance with the specified duties, the knowledge, abilities, skills, and experiences of one's own must be applied to the work to be suitable for the situation (Tongsan, N., 2014). Performance matters and useful for the management of the various agencies, the operation must be carried out carefully and justice to prevent various problems that will follow the performance of each individual will have effective results (Wattanarangsana, P., 2015). It must consist of competence, expertise and incentives to work toward the goal. Efficiency can be evaluated from the quality of work, workload, time and cost of operation (Peterson, E. & Plowman, E.G., 1989). Personnel are the key to leading the organization to success and goals set by the organization. Human resource management is the organization's main mission to achieve its objectives and effective (Vroom, H. V. & Deci, L.E., 1997).

### 3. Context of the Department of Energy Development and Promotion

The context of the Department of Energy Development and Promotion is the Department of Energy Development and Promotion, formerly known as the "National Energy Authority," established by His Majesty the King to enact the National Energy Act, which was published in the Royal Gazette on January 6, 1953, in Volume 70, Chapter 3. There is a committee called the "National Energy Board" that sets policies and considers various projects relating to energy, and there has been a change from the past to the present, namely the creation of the "Department of Energy Development and Promotion" under the Ministry of Energy and the announcement of the Act on Improvement of Ministries, Sub-Ministries, and Departments, B.E. 2545, in the Government Gazette, Volume 119, Section 99 Kor, dated October 2, 2002.

## METHODS

The study of documents and research related to recruitment that affects employee's performance in the Department of Energy Development and Promotion. Therefore, the researcher wrote a conceptual framework, as shown below.



The sample group used in this research was composed of 144 personnel from the Office of the Secretary of the Department of Energy Development and Promotion. The size of the sample was calculated from the proportion of the population (95%) by Taro Yamane's formula (Yamane, T., 1970) calculated 114 people. The researcher used a questionnaire to collect data this time, 114 sets to prevent lost data, which the researcher randomized using the probability sampling by simple random sampling.

The tool used in this research is a questionnaire created by the researcher after collecting data obtained from the study of concepts and theories from related research. To study how personnel recruitment affects an employee's performance efficiency in the Department of Energy Development and Promotion, the questionnaire is divided into 3 parts as follows.

Part 1 questions on demographic characteristics, include sex, age, education level, job title, and average monthly income. It is a report-type questionnaire.

Part 2 focuses on personnel recruitment, with 16 items divided into four categories: 4 items on human resource planning, 4 items on personnel selection, 4 items on determining recruitment methods, and 4 items on job specifications.

Part 3 questions about employee's performance efficiency in the Department of Energy Development and Promotion has 14 items with 4 components: 3 items on quality of work, 3 items on quantity of work, 4 items on time, and 4 items on cost.

The questions in Part 2 and Part 3 were questionnaires based on Likert's scale with 5 levels: very high, high, average, low, and very weak.

The content validity determined by the Index of Concordance (IOC). The researcher selected question topics with an IOC value greater than .5 to be used as questionnaires from three experts who examined the questionnaire and determined that every questionnaire created by the researcher has content validity. covered on each side and cover each side and cover the objectives of the research.

The reliability determined by Cronbach's alpha coefficient for personnel recruitment was 0.935, employee's performance efficiency in the Department of Energy Development and Promotion was 0.917, and personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion was 0.956.

The researcher took all the received questionnaires to check their completeness and analyzed them statistically by using a computer to calculate the statistical values with a statistical package by the following steps:

1. Analyze the descriptive statistics describing the demographic characteristics of the sample using statistics, frequency, and percentage. The analysis of personnel recruitment that affects the employee's performance efficiency in the Department of Energy Development and Promotion using mean and standard deviation.

2. Hypothesis Testing in Inferential Statistics as Regression

2.1 Examine the correlation between all independent variables. According to the conditions laid down in the preliminary terms of the linear regression analysis, using the Pearson product moment correlation coefficient to find the relationship between the quantitative variables.

2.2 Examine the appropriateness of personnel recruitment affects an employee's performance efficiency in the Department of Energy Development and Promotion model using a VIF (Variance Inflation Factor) value not more than 5, Tolerance value not less than 0.2, and Eigen value not more than 10.0, so that all independent variables do not have a relationship and there is no multicollinearity.

2.3 An analysis of personnel recruitment affects an employee's performance efficiency in the Department of Energy Development and Promotion model uses stepwise multiple regression analysis by using variables to forecast in the model one by one.

2.4 Create a model of personnel recruitment affects an employee's performance efficiency in the Department of Energy Development and Promotion using the equation

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots$$

Where:

Y is the dependent variable

a is the constant

$b_1, b_2, b_3$ , is the regression coefficient  
 $x_1, x_2, x_3, x_4$ , is the independent variable

## RESULTS

### Results of the employee demographic analysis in the Department of Energy Development and Promotion

The results of the demographic analysis of employee in the Department of Energy Development and Promotion were gender, age, education level, average monthly income, and work experience found that males made up 47.3 percent of the participants, with 52 females making up 39.7 percent. Most of the ages were in the range of 26–30 years with 46 people representing 35.1 percent, less than or equal to 25 years with 44 people representing 33.6 percent, and 60 years and over with 17 people representing 13.0 percent. Most of them graduated a bachelor's degree with 57 people representing 43.5 percent, higher than a bachelor's degree with 30 people representing 22.9 percent, and followed by lower than a bachelor's degree with 27 people representing 20.6 percent. Most of the average monthly income is in the range of 15,000-220,000 baht with 62 people representing 47.3 percent, 20,001 - 25,000 baht with 25 people representing 19.1 percent, followed by 30,001 baht or more with 18 people representing 13.7 percent. Most of the work experience is in the range of 2–3 years with 51 people representing 38.9 percent, less than 1 year with 40 people representing 30.5 percent, followed by 6 years or more with 14 people representing 10.7 percent.

### Results analysis of personnel recruitment in the Department of Energy Development and Promotion

#### 1. Human resource planning

Results analysis of personnel recruitment in the Department of Energy Development and Promotion in human resource planning were found that at a high level ( $\bar{x}=3.97$ , S.D.=.543). If considering items one by one, the result was at a high level. First, my organization has clearly publicized is human resource planning ( $\bar{x}=4.01$ , S.D.=.602). Second, my organization has human resource planning that is sufficient for operations ( $\bar{x}=3.99$ , S.D.=.556). Next, my organization set policies and goals ( $\bar{x}=3.95$ , S.D.=.650). Finally, my organization has a clear organizational policy and goals ( $\bar{x}=3.94$ , S.D.=.656)

#### 2. Personnel selection

Results analysis of personnel recruitment in the Department of Energy Development and Promotion in personnel selection were found that at a high level ( $\bar{x}=3.77$ , S.D.=.675). If considering items one by one, the result was at a high level. First, my organization chooses personnel to fill in, appoints them, tests their knowledge, and evaluates their results in accordance with the specifications ( $\bar{x}=3.87$ , S.D.=.770). Next, my organization has a selection process to obtain the personnel most suitable for the position ( $\bar{x}=3.79$ , S.D.=.803). Then, my organization has clearly defined skills and competencies required for key roles ( $\bar{x}=3.73$ , S.D.=.779). Last, my organization has a selection process to obtain the personnel most suitable for the position ( $\bar{x}=3.68$ , S.D.=.791).

#### 3. Determination of recruitment methods

Results analysis of personnel recruitment in the Department of Energy Development and Promotion in determination of recruitment methods were found that at a high level ( $\bar{x}=3.77$ , S.D.=.634). If considering items one by one, the result was at a high level. First, my organization allocates personnel with knowledge and competencies that match the line of work ( $\bar{x}=3.90$ , S.D.=.882). Second, my organization manages adequate personnel in practice ( $\bar{x}=3.80$ , S.D.=.697). Next, my organization has data collection process, determine the skills, functions, knowledge required for the job ( $\bar{x}=3.70$ , S.D.=.797). Finally, my organization cooperates in the operation very well ( $\bar{x}=3.67$ , S.D.=.827).

#### 4. Job specification

Results analysis of personnel recruitment in the Department of Energy Development and Promotion in job specification were found that at a high level ( $\bar{x}=3.80$ , S.D.=.674). If considering items one by one, the result was at a high level. First, I want to work with a clear sequence of steps ( $\bar{x}=3.90$ , S.D.=.798). Next, I want to do a job where I will have authority on the job and the freedom to choose how to operate ( $\bar{x}=3.86$ , S.D.=.763).

Then, I mainly considered the nature of job satisfaction ( $\bar{x}$ =3.79, S.D.=.846). Last, I like work that is interesting and challenging ( $\bar{x}$ =3.65, S.D. =.820).

5. Overall

Results analysis of personnel recruitment in the Department of Energy Development and Promotion overall were found that at a high level ( $\bar{x}$ =3.83, S.D. =.517). If considering items one by one, the result was at a high level. First, human resource planning found at a high level ( $\bar{x}$ =3.97, S.D. =.543). Second, job specification found at a high level ( $\bar{x}$ =3.80, S.D. =.674). Third, determination of recruitment methods found at a high level ( $\bar{x}$ =3.77, S.D. =.634). Last, personnel selection found at a high level ( $\bar{x}$ =3.77, S.D. =.675) as shown in Table 1.

**Table 1**  
**Mean and Standard Deviation of Personnel recruitment**  
**in the Department of Energy Development and Promotion**

Personnel recruitment in the Department of Energy Development and Promotion	Level of Agreement		
	$\bar{x}$	S.D.	Results
1. Human resource planning	3.97	.543	High
2. Personnel selection	3.77	.675	High
3. Determination of recruitment methods	3.77	.634	High
4. Job specification	3.80	.674	High
<b>Overall</b>	<b>3.83</b>	<b>.517</b>	<b>High</b>

**Results analysis of employee’s performance efficiency in the Department of Energy Development and Promotion**

1. The quality of work

Results analysis of employee’s performance efficiency in the Department of Energy Development and Promotion in the quality of work were found that at a high level ( $\bar{x}$ =3.83, S.D. =.733). If considering items one by one, the result was at a high level. First, I have a conscience for the quality of work ( $\bar{x}$ =3.89, S.D. =.768). Next, I can work according to the organization’s plans for the quality of the work or output ( $\bar{x}$ =3.82, S.D. =.858). Finally, I have knowledge and understanding about the steps in the operation. The results come out with quality ( $\bar{x}$ =3.77, S.D. =.831).

2. The quantity of work

Results analysis of employee’s performance efficiency in the Department of Energy Development and Promotion in the quantity of work were found that at a high level ( $\bar{x}$ =3.77, S.D. =.780). If considering items one by one, the result was at a high level. First, I always improve your performance to meet your target throughput ( $\bar{x}$ =3.82, S.D. =.905). Then, I always try to work to achieve the targeted quantity of work ( $\bar{x}$ =3.76, S.D. =.905). Last, I always attentive and follow up on assigned tasks ( $\bar{x}$ =3.72, S.D. =.780).

3. The time

Results analysis of employee’s performance efficiency in the Department of Energy Development and Promotion in time were found that at a high level ( $\bar{x}$ =3.80, S.D.=.686). If considering items one by one, the result was at a high level. First, I have developed new technologies to improve work efficiency ( $\bar{x}$ =3.86, S.D. =.763). Then, I can complete the assigned tasks in time ( $\bar{x}$ =3.82, S.D.=.847). Next, I can prioritize tasks in accordance with the specified time appropriately ( $\bar{x}$ =3.80, S.D.=.904). Finally, I always have to improve your work to finish the job on time ( $\bar{x}$ =3.73, S.D.=.844).

4. The cost

Results analysis of employee’s performance efficiency in the Department of Energy Development and Promotion in cost were found that at a high level ( $\bar{x}$ =3.73, S.D. =.644). If considering items one by one, the

result was at a high level. First, I have an operational plan that can reduce unnecessary costs ( $\bar{x}=3.82$ , S.D.=.767). Next, I consider the use of resources or equipment of the organization in the economical operation ( $\bar{x}=3.76$ , S.D.=.669). Then, I have operating costs that are suitable for the job ( $\bar{x}=3.69$ , S.D.=.754). Finally, I have the least damaged work ( $\bar{x}=3.64$ , S.D.=.788).

#### 5. Overall

Results analysis of employee's performance efficiency in the Department of Energy Development and Promotion overall were found that at a high level ( $\bar{x}=3.78$ , S.D. =.597). If considering items one by one, the result was at a high level. First, the quality of work found at a high level ( $\bar{x}=3.83$ , S.D. =.733). Second, the time found at a high level ( $\bar{x}=3.80$ , S.D. =.686). Third, the quantity of work found at a high level ( $\bar{x}=3.77$ , S.D. =.780). Last, the cost found at a high level ( $\bar{x}=3.73$ , S.D.=.644) as shown in Table 2.

**Table 2**

**Mean and Standard Deviation of Employee's performance efficiency in the Department of Energy Development and Promotion**

Employee's performance efficiency in the Department of Energy Development and Promotion	Level of Agreement		
	$\bar{x}$	S.D.	Results
1. The quality of work	3.83	.733	High
2. The quantity of work	3.77	.780	High
3. The time	3.80	.686	High
4. The cost	3.73	.644	High
<b>Overall</b>	<b>3.78</b>	<b>.597</b>	<b>High</b>

#### Results analysis of Pearson Product Moment Correlation Coefficient

The statistic that the researcher used to test was the Pearson Product Moment Correlation Coefficient to find the relationship between four quantitative variables: human resource planning; personnel selection, determination of recruitment methods, job specification and employee's performance efficiency in the Department of Energy Development and Promotion. The results analysis of the correlation coefficient between personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion as shown in Table 3.

**Table 3**

**Correlations of model variables**

Measure	Employee's performance efficiency in the Department of Energy Development and Promotion	Human resource planning	Personnel selection	Determination of recruitment methods	Job specification
1. Employee's performance efficiency in the Department of Energy Development and Promotion	1.000				
2. Human resource planning	.431**	1.000			
3. Personnel selection	.662**	.431**	1.000		
4. Determination of recruitment methods	.665**	.385**	.763**	1.000	
5. Job specification	.784**	.462**	.626**	.623**	1.000

\*\*p <.01

The correlation coefficient between personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion was found to be no more than .80 (Stevens, J., 1996). All independent variables in this research showed no multicollinearity. Therefore, every independent variable can be used in stepwise multiple regression analysis, which uses variables to predict in the model one by one.

### Results of Regression Analysis

1. Examination of the appropriateness of personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion model, including human resource planning, personnel selection, determination of recruitment methods, job specification, the quality of work, the quantity of work, the time, the cost. The VIF (Variance Inflation Factor) value is not more than 5, the Tolerance value is not less than 0.2, and the Eigen value is not more than 10.0. All of them are not related to each other, it shows no multicollinearity as shown in Table 4.

**Table 4**  
**Aptness of Model**

Model		$\beta$	t	Collinearity	Statistics
				Tolerance	VIF
Model1	Constant	1.142	5.698		
	Job specification	.695	13.369**	1.000	1.000
Model2	Constant	.725	3.401		
	Job specification	.535	8.612**	.612	1.635
	Determination of recruitment methods	.271	4.108**	.612	1.635

\*\*p <.01, Highest Eigen Value of Model1 is 1.985 and Model2 is 2.973

The results of the correlation of all factors in Model 1 revealed that the highest VIF (Variance Inflation Factor) was 1.635, which was not more than 5, the smallest Tolerance value was 0.612, which was not lower than 0.2, and the highest Eigen value was 2.973, which is not greater than 10.0, indicating that the independent variables analyzed in the model were not correlated, which does not create multicollinearity. Moreover, the data is suitable for stepwise multiple regression analysis. (Hair, J.F. et al., 2010)

2. Stepwise multiple regression analysis of personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion model was used to predict variables in the model one by one as shown in Table 5.

**Table 5**  
**Regression Analysis**

Employee's performance efficiency in the Department of Energy Development and Promotion	Model1	Model2
Constant	1.142	.725
Job specification	.695	.535
Determination of recruitment methods		.271
R <sup>2</sup>	.615	.666
S.E.	.372	.348
F	178.719**	110.460**
p-value of F	.000	.000

\*\*p <.01

The results analysis of the model1 revealed that the job specification aspect affecting employee's performance efficiency in the Department of Energy Development and Promotion at statistically significant level .01 and able to explain employee's performance efficiency in the Department of Energy Development and Promotion up to 61.5 percent with a standard error in forecasting equal to  $\pm .372$ . This means that the job specification affecting an employee's performance efficiency in the Department of Energy Development and Promotion can be written as a regression equation as follows: Employee's performance efficiency in the Department of Energy Development and Promotion = 1.142 + (0.695\* Job specification)

The results analysis of the model2 when using determination of recruitment methods aspect come in for further analysis, it can explain employee's performance efficiency in the Department of Energy Development and Promotion increased to 66.6% with a standard error of forecasting equal to  $\pm .348$ . It was found that determination of recruitment methods aspect was related to employee's performance efficiency in the Department of Energy Development and Promotion at statistically significant level .01 and later when job specification and determination of recruitment methods aspect were also analyzed together at statistically significant level .01. This means that the determination of recruitment methods affecting an employee's performance efficiency in the Department of Energy Development and Promotion can be written as a regression equation as follows: Employee's performance efficiency in the Department of Energy Development and Promotion =  $0.725 + (0.535 * \text{Job specification}) + (0.271 * \text{Determination of recruitment method})$

## CONCLUSION AND FUTURE WORK

### Conclusions

1. Employees in the Department of Energy Development and Promotion, numbering 114 people, were mostly male, aged 26–30 years old, holding a bachelor's degree, with an average income of 15,000–20,000 baht and work experience of 2–3 years.

2. In terms of personnel recruitment overall and by aspect, it was found that four aspects were at a high level: human resource planning, job specification, determination of recruitment method, and personnel selection, respectively.

3. In terms of employee's performance efficiency in the Department of Energy Development and Promotion overall and by aspect, it was found that four aspects were at a high level: the quality of work, the time, the quantity of work, and the cost, respectively.

4. The correlations between personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion was found to be no more than .80 (Stevens, J., 1996). All independent variables in this research showed no multicollinearity.

5. Regression equation of personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion as Employee's performance efficiency in the Department of Energy Development and Promotion =  $0.725 + (0.535 * \text{Job specification}) + (0.271 * \text{Determination of recruitment method})$  that can explain employee's performance at 66.6 percent and there was a standard error in forecasting equal to  $\pm .348$ .

### Discussions

The researcher brought the following important issues to discuss the results based on the findings of this research:

1. According to the findings, overall personnel recruitment was at a high level in all aspects of human resource planning, followed by job specification, determination of recruitment methods, and personnel selection, respectively. The findings highlight the significance of personnel recruitment in obtaining employees with the knowledge, ability, including experience, and characteristics that meet the needs and are suitable for the position as required by the organization. This is in accordance with the concept of Werther and Davis (1996), which consists of four aspects for the organization to be able to achieve its goals and increase profits, leading to the organization's success: Human Resource Planning means the process of determining the direction of the organization, developing a strategic plan, and analyzing the human resource needs of the organization both now and in the future to achieve the organization's goals. Job specification means the scope of duties and responsibilities of a job position in the organization, including specifying the necessary qualifications of that job position to work in the position that the organization wants. Personnel selection entails determining selection criteria, interviewing, assessing, and selecting candidates, as well as conducting educational background checks, reference checks, criminal background checks, physical examinations, and negotiating employment contracts.

2. Employee performance efficiency in the Department of Energy Development and Promotion was high overall, as measured by quality of work, quantity of work, time, cost, and orderliness. Findings show that missions and duties were established in conjunction with social positions. A person or group of people in any position must perform the work in accordance with the duties specified, their knowledge, abilities, skills, and experiences, and the situation (Whangmahaporn, P. et al., 2018). This is in line with the concept of Peterson and Plowman (1989), who found that to produce good and effective results from an employee's performance, it must consist of two elements: the ability and expertise of the operator and the motivation to work that leads to the use. Employee's performance efficiency is necessary to consider the satisfaction and motivation of performing tasks, which is similar to Herring Emerson's approach of eliminating some points and summarizing the four elements of efficiency, consisting of quality of work, quantity of work, time, and cost (Emerson, H., 1914).



3. From the hypothesis testing about job specification aspects affecting an employee's performance efficiency in the Department of Energy Development and Promotion, if the work is appropriate, challenging, and has a clear workflow sequence, it can give employees the opportunity to continue their studies in order to increase their knowledge and qualifications, which will result in greater operational efficiency. From the hypothesis testing about determination of recruitment methods affecting an employee's performance efficiency in the Department of Energy Development and Promotion, determination of recruitment methods can recruit personnel through the network to facilitate job applicants, such as through the organization's website, government employment centers, or allowing applicants to walk in. The organization needs personnel recruitment and selection of knowledgeable and suitable personnel to work efficiently in the required position.

### **Suggestion for Future Work**

#### 1. Suggestions obtained from the implementation of the research results

1.1 From the research results, it was found that the quality of work, quantity of work, time, and cost were at a high level. Organizations must therefore continuously focus on the work of their employees by considering the organization's established regulations as well.

1.2 Organizations should pay attention and promote recruitment. From the research results, it was found that job specification and determination of recruitment methods, which must consider the needs of employees and the needs of the organization to suit, such as having an organization's operational process be efficient, will be able to attract qualified job applicants as well as creating a good and clear image of the organization in order to recruit personnel to work successfully.

#### 2. Suggestions for future work

2.1 This research of personnel recruitment affecting employee's performance efficiency in the Department of Energy Development and Promotion use questionnaire as a tool. Therefore, to investigate the impact of personnel recruitment on an employee's performance efficiency in greater depth, in-depth interviews should be used to gain insights.

2.2 This research surveyed employee's performance efficiency in the Department of Energy Development and Promotion using the principles of Peterson and Plowman (1989) in four components, consisting of the quality of work, quantity of work, time and cost. Further studies should be conducted in the remaining areas to continuously improve and develop employee's performance efficiency in the Department of Energy Development and Promotion.

### **REFERENCES**

- Vehama, S. (2016), —The recruitment and selection of staff, Prince of Songkla University, Songkla.
- Tongsan, N. (2014), —Factors Effecting Work Efficiency of Employees in Cosmetics Manufacturing Business in Pathumthani, Rajamangala University of Technology Thanyaburi, Pathumthani.
- Wattanasang, P. (2015), —Increasing Performance Efficiency of Employees In-4 Star Hotel in Siam Square, Bangkok University, Pathumthani.
- Whangmahaporn, P., Simmonds, P. & Whangmahaporn, B. (2018), —Factors Affecting Quality of Life of the Elderly in Thailand, *Asian Political Science Review*, Vol.2, No.2, Pp. 79-87.
- Werther, Jr. & Davis, B. (1996), —Human resources and personnel management. New York: McGraw-Hill.
- Peterson, E. & Plowman, E.G. (1989), —Business organization and management. Homewood, Illinois: Richard D. Irwin.
- Vroom, H. V., & Deci, L. E. (1997), —Management and motivation. New York: Penguin Book.
- Yamane, T. (1970), —Statistic: An Introductory Analysis, 2nd edition. New York: Harper & Row.
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2010), — Multivariate Data Analysis, 7th edition. New York: Pearson.
- Stevens, J. (1996), —Applied multivariate statistics for the social sciences, 3rd edition. Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers.
- Emerson, H. (1914), —Efficiency as a basis for operation and wages. New York: The Engineering magazine.