

**THE RELATIONSHIP BETWEEN PERSONAL FACTORS AFFECTS
THE MOTIVATION OF EMPLOYEES OF AUTO PARTS
MANUFACTURING COMPANY CASE STUDY: AMATA NAKORN
INDUSTRIAL ESTATE, CHONBURI PROVINCE**

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Abstract

The objective of this research is to study the personal factors and the motivation of the employees. Data were collected by using questionnaires as a research tool. The sample was selected by purposive and judgmental sampling. The sample was engineer staffs at a Japanese auto parts company, in the Amata Nakorn Industrial Estate for 350 samples. Statistics used for data analysis were descriptive statistics such as frequency, percentage, mean and standard deviation. Inferential statistics were independent sample t-test and One-way ANOVA. The results of the study revealed that personal factors influenced the motivation of employees of auto parts companies in gender and education level. Different motives have different effects on work. On the other hand, different periods of work resulted in different motivations. The result suggested the organization to take into account about the different personal factors affecting motivation. In addition, the future research were discussed to place other organizational factors in order to predict the motivation to work.

Keyword: Work Motivation, Production of Automotive Parts, Industrial Estate

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Introduction

At present, Thailand is rapidly expanding in the industrial sector especially in the auto parts industry and has continuously expanded its investment. The auto parts industry has been designated by the government as one of the strategic industries for the development of Thai industrial and export sectors.

In the Amata Nakorn industrial estate, there are companies that manufacture auto parts for 32% of the entire industry (Amata Corporation Public Company Limited, 2009). In addition to consider the profit and loss, the operation is also full of competition, whether in terms of product quality and service, marketing, cost control, and other related. The problem that must be faced in every organization is the work of the people in the organization which is a valuable human resource of the organization. How to make those human resources work hard? We can do our best to get the best quality work and able to maintain human resources to stay with the organization for a long time. At present, the employee turnover rate is quite high. This may arise from causes such as problems between the boss and his subordinates, working environment, career advancement, and salary and benefits, etc (Chaimongkol, 2018). Therefore, in addition to the administration to achieve the organization's goals, working motivation is a top priority as well. To motivate employees to have good working motivation for the organization nowadays, wages and salary compensation may not be the first factor to motivate employees to create better and better results or having loyalty to the organization (Onputtha, & Chienwattanasook, 2019). The atmosphere in the organization, good relationships among the people in the organization, and good management are part of the success of any organization. When the system is well laid out, the consequences are usually good as well. When employees are motivated to work, this will affect the performance of employees. They feel that they are motivated by various means of motivation from the supervisor or organization. Employees feel that they should put their energy into their work for the organization. By bringing the skills, knowledge, and abilities that have to work with their full potential. The incentives will enable employees to perform their work most effectively. It will bring products with quality standards as the organization aims (Mamdani, & Minhaj, 2016).

At present, it is found that one of the major problems for automotive parts companies is some employees perform work without intention (Noviantoro, Moeins, & Madiistriyatno, 2018). They do not devote their physical and mental energy to work as expected. Lack of enthusiasm and have a short period of time to work with the company and then resign. Most of them are engineers, each of whom is responsible for different workloads. Therefore, have different skills and aptitudes. The problem is when the work piece manufacturing process is controlled by one employee and that employee resigns for various reasons. It affects the overall job due to recruiting of new employees which cannot be obtained immediately causing intermittent work. At the same time, the remaining employees will be responsible for the next task causing more workload and the result is the work has defects, etc. Therefore, this research is interested in studying the relationship between organizational management and employee

motivation. Using a case study of an auto parts manufacturing company Amata Nakorn Industrial Estate, Chonburi Province.

Research objectives

To study the personal factors affecting the motivation of employees of the automotive parts manufacturing company, a case study of Amata Nakorn Industrial Estate, Chonburi Province.

Expected benefits

The study result can provide the knowledge about the personal factors that affect work motivation and the operational motivation that affect the work efficiency of employees. Therefore, management can use the results as a motivation strategy for employees' work. It can be used as a guideline for executives to improve and change the organization's management to motivate employees to create good results for the organization and has the lowest employee turnover rate.

Research hypothesis

An employee of an auto parts manufacturing company, a case study at Amata Nakorn Industrial Estate, Chonburi Province with different personal factors have different job motivations.

Terminology definition

Performance motivation refers to the motivation that encourages work behavior.

Positive reinforcement refers to something that causes a person to perform a recurring behavior when that person has admiration/ congratulations on incentive events or situations.

Negative reinforcement refers to what causes a person to behave to retreat or distance himself from a recurring event in the future. In response to a situation in which the person does not appreciate or delight.

Punishment refers to the things that impair a person's expressive behavior. If the punishment has already taken place, it makes the person undesirable and has the chance to decrease steadily or it will happen very rarely in the future.

Extinction refers to the things that impair a person's expressive behavior. If the person deems that the value or acceptance or support of their supervisor has ceased, it is the reason why people are delighted that their support has stopped.

Related concepts and theories

Meaning of motivation

Tiyaw (2001) defines motivation as the force that motivates behavior. Set the direction of behavior and characterize it as a relentless commitment to that goal or incentive. Therefore, motivation consists of needs, force, effort, and goal.

Khechornanun (2008) defined motivation as the processes by which the body and mind are stimulated by stimuli to express behavior. In order to achieve the desired goals, motivated people have energy and effort to express themselves to achieve the goal. If there is an incentive to motivate the person in the job, he will be dedicated and work hard. The motivation is subtle and changeable. The management must have knowledge and understanding of motivating principles and techniques which will cause progress for the organization.

It can be concluded that motive refers to a driver that induces or motivates the expression of behavior in order to achieve the desired goals by taking various factors. This can be in the form of rewards, bonuses, positions, and penalties, which will trigger awakening. Motivation is necessary for the service provider to understand the management of people in the organization, employee work and performance, and career advancement. This motivation is a tool that executives or organizational leaders must focus on.

The importance of motivation

Klamrassamee (2010) has given the importance of motivation as follows:

1. Motivation enhances the work force. Energy is a vital driver of human action or behavior in any work. If a person is highly motivated to work, it surely makes diligent enthusiastic about getting the job done. In contrast to people who work in the “morning bowl, dinner bowl” type who work just to pass the day.
2. Motivation increases work effort in a person's persistence. Makes a person persevere and think of ways to lead their knowledge, abilities, and experience to make the most of their work. Not giving up or giving up effort easily. Even though the work has obstacles and when the work gets results well, they tend to think of ways to improve and develop even better.
3. Motivation helps changing a person's work style. Change variability form of work or how to work sometimes. The discovery of a better or more successful way to operate. Some psychologists believe change is a sign of a person's progress. It shows that an individual is seeking to learn something new. Giving a person a highly motivated life when struggling to achieve any objective. If not successful, a person is always trying to find out what went wrong and try to fix it in every way. This resulted in a change in work that eventually led to a suitable approach which may be different from the original.
4. Working motivation helps to strengthen the value of a complete human being to be a person who is motivated to work. It will be a person who strives to work towards progress and is determined to work in which he or she is responsible for progress and classified as person with a work ethics. They will be a person who has a responsibility, stable in duty, and has a work discipline, in which such characteristics show the completeness. People who have such characteristics is often no time left to think and do bad things.

Organizations with highly motivated individuals will inevitably result in achieving the desired goals. Employees who are motivated to work will devote their energy and fully capable in order to achieve results according to the policy and goals of the work.

Related research

Korphadung (2008) has studied employee motivation of auto parts manufacturing company, a case study of Amata Nakorn Industrial Estate, found that personal factors (age, education level, job position, average monthly income) have different motivating factors for work. Personal factors (gender, age, education level, job position, work experience, average monthly income) have different supporting factors in the work. The level of motivation factor in work is very high in the success of the job. Acceptance nature of work, accountability, and the importance of motivation factors for work was at a moderate level in progress. In terms of the importance of supporting factors in the workplace, it was high in relation to the co-workers, career status, working conditions, privacy security in work, and the method of governance and command. The importance of working incentives was at a moderate level in terms of welfare and compensation, future opportunities, policy, and administration

Research conceptual framework

A study of the relationship between personal factors and employment motivation of auto parts manufacturing company, a case study of Amata Nakorn Industrial Estate, Chonburi Province, researchers have set the following conceptual framework.

1. Personal factors were gender, education level, and length of work.
2. Motivation in work, researchers have adopted the theory of reinforcement (Skinner, 1953), including positive reinforcement, negative reinforcement, punishment, and extinction.

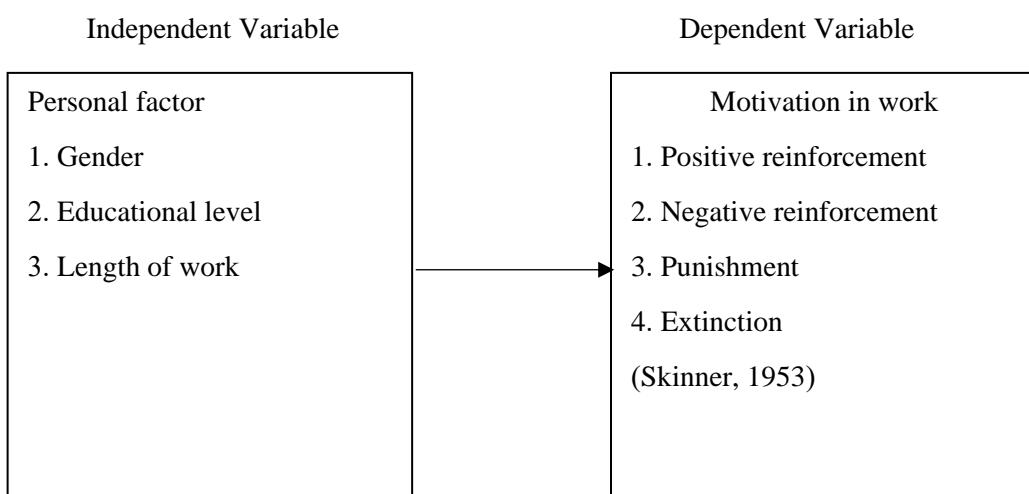


Figure 1 Research conceptual framework

Research results

The research hypothesis is personal factors affecting work motivation of respondents in Auto Parts Company, Amata Nakorn Industrial Estate, Chonburi Province.

Hypothesis 1.1 Employees of different genders have different effects on their positive reinforcement in their work.

H_0 : Employees of different genders have no different effects on their positive reinforcement in their work.

H_1 : Employees of different genders have different effects on their positive reinforcement in their work.

Table 1 The results of a comparative analysis of the positive reinforcement for work classified by gender of employees.

Gender	n	\bar{X}	SD	t	P-value
Male	207	3.87	0.54	2.69*	0.008
Female	94	3.69	0.56		

* P-value < 0.05

From Table 1, the results of the comparative analysis of positive reinforcement in the workplace classified by gender of employees. The independent sample t-test was used in the hypothesis test at 95% confidence level. The results showed that the P-value was 0.008, which was less than 0.05. Employees of different genders have different effects on their positive reinforcement in their work.

Hypothesis 1.2 Employees of different genders have different effects on negative reinforcement in the workplace.

H_0 : Employees of different genders have no different effects on negative reinforcement in the workplace.

H_1 : Employees of different genders have different effects on negative reinforcement in the workplace.

Table 2 The results of comparative analysis of negative reinforcement in work classified by employee gender.

Gender	n	\bar{X}	SD	t	P-value
Male	207	3.28	0.64	-1.541	.124
Female	94	3.40	0.56		

From Table 2, the results of comparative analysis of negative reinforcement in the workplace classified by gender of employees. The independent sample t-test was used to test the hypothesis at 95% confidence level. The results showed that the P-value was 0.124, which was greater than 0.05. The employees of different genders had no different effect on negative reinforcement in the workplace.

Hypothesis 1.3 Employees of different genders have different effect on punishment motives for work.

H_0 : Employees of different genders have no different effect on punishment motives for work.

H_1 : Employees of different genders have different effect on punishment motives for work.

Table 3 The results of a comparative analysis of the punishment motive for work classified by gender of employees.

Gender	n	\bar{X}	SD	t	P-value
Male	207	3.35	0.61	-1.11	0.267
Female	94	3.43	0.62		

From Table 3, the results of comparative analysis of the punishment motive classified by gender of employees. The independent sample t-test was used to test the hypothesis at 95% confidence level. The results showed that the P-value was 0.267, which was greater than 0.05. The employees of different genders have the same effect on punishment motive in work.

Hypothesis 1.4 Employees of different genders have different effect on extinction in the workplace.

H_0 : Employees of different genders have no different effect on extinction in the workplace.

H_1 : Employees of different genders have different effect on extinction in the workplace.

Table 4 The results of the analysis compare the incentive for extinction in work classified by employee gender.

Gender	n	\bar{X}	SD	t	P-value
Male	207	3.29	0.66	-1.27	0.204
Female	94	3.39	0.69		

From Table 4, the results of the comparative analysis of the extinction of work classified by gender of employees. The independent sample t-test was used in the hypothesis test at 95% confidence level. The test results showed that the P-value was 0.204, which was greater than 0.05. The employees of different genders have the same effect on extinction in the workplace.

Hypothesis 1.5 Employees of different educational levels have different effects on the positive motivation of work.

H_0 : Employees of different educational levels have no different effects on the positive motivation of work.

H_1 : Employees of different educational levels have different effects on the positive motivation of work.

Table 5 The results of comparative analysis of the positive reinforcement in work classified by educational level of employees.

Educational Level	n	\bar{X}	SD	t	P-value
Bachelor	248	3.80	0.53	-0.83	0.411
Higher than Bachelor	53	3.88	0.67		

From Table 5, the results of comparative analysis results of positive reinforcement in the workplace classified by educational level of employees. By using the independent sample t-test at a significance level 0.05, it was found that the P-value was 0.411, greater than 0.05. The main hypothesis H_0 could not be rejected. The motivation of positive reinforcement in work is no different.

Hypothesis 1.6 Employees of different educational levels have different effects on negative reinforcement in their workplace.

H_0 : Employees of different educational levels have no different effects on negative reinforcement in their workplace.

H_1 : Employees of different educational levels have different effects on negative reinforcement in their workplace.

Table 6 The results of comparative analysis of negative reinforcement in work classified by educational level of employees.

Educational Level	n	\bar{X}	SD	t	P-value
Bachelor	248	3.25	0.60	-3.96*	0.000
Higher than Bachelor	53	3.62	0.64		

* P-value < 0.05

From Table 6, the results of comparative analysis of negative reinforcement in the workplace classified by educational level of employees. By using the independent sample t-test at a significance level 0.05, it was found that the P-value was 0.000, less than 0.05. The rejection of the main hypothesis H_0 meant that the employees with different educational levels had an effect on different negative reinforcement.

Hypothesis 7 Employees of different educational levels have different effects on job punishment motives.

H_0 : Employees of different educational levels have no different effects on job punishment motives.

H_1 : Employees of different educational levels have different effects on job punishment motives.

Table 7 The results of a comparative analysis of the work punishment classified by educational level of employees.

Educational Level	n	\bar{X}	SD	t	P-value
Bachelor	248	3.33	0.59	-2.57*	0.011
Higher than Bachelor	53	3.57	0.66		

* P-value < 0.05

From Table 7, the results of the comparative analysis of the incentive of work punishment classified by educational level of employees. By using the independent sample t-test at a significance level 0.05, it was found that the P-value was 0.011, less than 0.05. The rejecting the main hypothesis

H_0 means that the employees with different educational levels had an effect on different work punishment.

Hypothesis 1.8 Employees of different educational levels have an effect on different job extinction.

H_0 : Employees of different educational levels have no different effect on job extinction.

H_1 : Employees of different educational levels have different effect on job extinction.

Table 8 The results of the comparative analysis of the incentive on job extinction classified by educational level of employees.

Educational Level	n	\bar{X}	SD	t	P-value
Bachelor	248	3.32	0.66	0.25	0.802
Higher than Bachelor	53	3.30	0.71		

From Table 8, the results of comparative analysis of incentive on job extinction classified by educational level of employees. By using the independent sample t-test at a significance level 0.05, the P-value was 0.802 greater than 0.05, that is, the main hypothesis H_0 could not be rejected. The incentive on job extinction is not different.

Hypothesis 1.9 Employees with different lengths of work have different effects on positive reinforcement in their work.

H_0 : Employees with different lengths of work have no different effects on positive reinforcement in their work.

H_1 : Employees with different lengths of work have different effects on positive reinforcement in their work.

Table 9 The results of comparative analysis of the positive reinforcement in the workplace classified by the length of work of the employees.

	Length of work	n	\bar{X}	SD	F	P-value
Positive reinforcement	6 month-1 yr.	63	3.83	0.45	0.959	0.430
	1yr. - 2 yrs.	62	3.77	0.50		
	3 yrs. - 4 yrs.	70	3.91	0.50		
	5 yrs. - 6 yrs.	66	3.73	0.62		
	6 yrs. or more	40	3.80	0.69		

From Table 9, the results of the comparative analysis of positive reinforcement in the workplace classified by the length of work. Using the one-way ANOVA F-test statistic at a significance level 0.05, the P-value was 0.430 greater than 0.05. The main hypothesis could not be rejected. Meaning that employees with different length of work has no different effect on the positive reinforcement in the workplace.

Hypothesis 1.10 Employees with different lengths of work have different effects on negative reinforcement in their work.

H_0 : Employees with different lengths of work have no different effects on negative reinforcement in their work.

H_1 : Employees with different lengths of work have different effects on negative reinforcement in their work.

Table 10 The results of comparative analysis of the negative reinforcement in the workplace classified by the length of work of the employees.

	Length of work	n	\bar{X}	SD	Brown-Forsythe	P-value
Negative reinforcement	6 month-1 yr.	63	3.44	0.46	1.220	0.303
	1 yr. -2 yrs.	62	3.29	0.59		
	3 yrs. - 4 yrs.	70	3.24	0.74		
	5 yrs. - 6 yrs.	66	3.25	0.62		
	6 yrs. or more	40	3.39	0.64		

From Table 10, the results of the comparative analysis of negative reinforcement in the workplace classified by the length of work. Using statistics Brown-Forsythe at significance level 0.05, the P-value was 0.303 greater than 0.05, that is, the main hypothesis H_0 could not be rejected. Meaning that employees with different length of work had no different effects on negative reinforcement in their work.

H_0 : Employees with different lengths of work have no different effects on punishment in their work.

H_1 : Employees with different lengths of work have different effects on punishment in their work.

Table 11 The results of comparative analysis of the punishment in the workplace classified by the length of work of the employees.

	Length of work	n	\bar{X}	SD	F	P-value
Punishment	6 month-1 yr.	63	3.57	0.59	2.225	0.066
	1 yr. - 2 yrs.	62	3.33	0.62		
	3 yrs. - 4 yrs.	70	3.33	0.58		
	5 yrs. - 6 yrs.	66	3.29	0.57		
	6 yrs. or more	40	3.34	0.69		

From Table 11, the results of the comparative analysis of the work punishment classified by the length of work. By using the one-way ANOVA F-test statistic at a significance level 0.05, the P-

value was 0.066 greater than 0.05. The main hypothesis could not be rejected. The effect on the punishment the workplace is not different.

Hypothesis 1.12 Employees with different lengths of work have different effects on extinction in their work.

H_0 : Employees with different lengths of work have no different effects on extinction in their work.

H_1 : Employees with different lengths of work have different effects on extinction in their work.

Table 12 The results of comparative analysis of the extinction in the workplace classified by the length of work of the employees.

	Length of work	n	\bar{X}	SD	Brown-Forsythe	P-value
Extinction	6 month-1 yr.	63	3.52	0.70	2.175	0.073
	1 yrs. - 2 yrs.	62	3.21	0.64		
	3 yrs. - 4 yrs.	70	3.21	0.58		
	5 yrs. - 6 yrs.	66	3.29	0.56		
	6 yrs. or more	40	3.38	0.89		

From Table 12, the results of comparative analysis of incentive for job extinction classified by the length of work. Using statistics Brown-Forsythe at significance level 0.05, the P-value was 0.073 greater than 0.05, that is, the main hypothesis H_0 could not be rejected. Employees with different lengths of work had the same effect on job extinction.

Research findings

General information of respondents

The sample group is employees working in Amata Nakorn Industrial Estate, Chonburi Province. There were 301 respondents, of which were 207 males (68.80%) and 94 females (31%), bachelor's degree level of 248 people (82.40%), length of work between 3 yrs. – 4 yrs. for 70 people (23.30%).

Data analysis on job motivation of respondents in auto parts companies, Amata Nakorn Industrial Estate, Chonburi Province

The results from the analysis of the employee opinion questionnaire showed that the employees had a level of opinion on the motivation of the employees. In terms of positive reinforcement, there was a high level ($\bar{X} = 3.81$), negative reinforcement was at moderate level ($\bar{X} = 3.31$), the punishment was at moderate level ($\bar{X} = 3.37$), and the extinction was at moderate level ($\bar{X} = 3.31$).

The results of hypothesis testing showed that

1. Employees of different genders have no different job motivation in negative reinforcement, punishment, and extinction. For positive reinforcement, they were found different effect on job motivation.

2. Employees of different educational levels have different effects on negative reinforcement and punishment. It was found that there was no difference in distinction.

3 . Employees with varying lengths of work have no different effects on positive reinforcement, negative reinforcement, punishment, and distinction.

Discussion of research findings

From the study of relationship between organizational management and motivation of employees of auto parts manufacturing company, Case study: Amata Nakorn Industrial Estate, Chonburi Province refer to related research as follows:

Comparing employee motivation in auto parts companies, Amata Nakorn Industrial Estate, Chonburi Province classified by personal factors. There was found that different gender and education level have different in job motivation. When considered each category, it was found that the gender of the employees has different effect on a positive reinforcement, educational levels have different effect on negative reinforcement and punishment, monthly income has different effect on negative reinforcement and extinction in work.

This research result is consistent with the research of Khampadung (2008) in employee motivation of the automotive parts manufacturing company, a case study of Amata Nakorn Industrial Estate. The research found that the personal factors were education level and average monthly income have different job motivation. The personal factors in gender and average monthly income have different supporting factors in the work.

Also, the research result is in line with the research of Yoosuk (2018) that studied motivation affecting the performance of truck drivers among registered transport operators in Bangkok and its vicinity. The research results were found that Truck drivers with different educational level have different job motivation.

The result also consistent with the research of Dusida Khumsawat and Krisada Muhammad (2020) in factors affecting the performance motivation of employees of Honda Automobile (Thailand) Co., Ltd. The research results were found the personal factors in educational levels and average monthly income affect different job motivation.

Suggestions for the next research

There should be a study of the relationship between corporate management and job motivation of the employees in an auto parts manufacturing company to enable entrepreneurs to adjust their business strategies according to the current situation.

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