

ACHIEVEMENT MOTIVATION FACTORS, CREATIVE BEHAVIORS AND EMOTIONAL INTELLIGENCE THAT AFFECT WORK EFFICIENCY OF THE STAFF IN THE DEPARTMENT OF RURAL ROADS, THAILAND

Saowanee Woraphet*, Phurichchaya Taeporamaysamai
and Pattama Suriyakul Na Ayudhya****

* Graduate Student of Kasetsart University, Thailand

E-mail Address: saowanee.w2524@gmail.com

**Department of Business Management, Faculty of Liberal Arts and Management Science,
Kasetsart University, Thailand

E-Mail: Ornuma.t@ku.ac.th, Pattama.s@ku.th

ABSTRACT

The department of Rural Roads is a government agency under the Ministry of Transport. It is responsible for constructing roads, bridges and maintaining roads connecting subdistricts and districts. There are regional offices around Thailand to accommodate the commute, transportation, logistic and ASEAN Economic Community. The staff has to work continuously in order to solve the public's travel issues due to the limitation of the country's budget and the lack of personnel. On the other hand, the result of the tasks must be swift and efficient. The objective of this research is to study achievement motivation factors, creative behaviors and emotional intelligence that affect work efficiency of the staff in the Department of Rural Roads. Quantitative method was selected to conduct this research. The sample group consists of 259 staff of the Department of Rural Roads, who are government officers, government staffs and permanent staffs. Data were collected through 5-point Likert scale questionnaire surveys. Cronbach's Alpha was used to check the questionnaire's reliability. Various descriptive and inferential statistics such as Emotional intelligence, percentage, mean, standard deviation and multiple linear regressions were used.

The research finds that the Department of Rural Roads' staff opinions on work efficiency are high with the means of 4.44, 4.36 and 4.25, respectively. The result from hypothesis testing is that emotional intelligence can predict the staff's work efficiency up to 64.90% (adjusted R-square = 6.490), achievement motivation and creative behaviors and can predict the staff's work efficiency up to 50.40% (adjusted R square = 0.504), 30.10 % (adjusted R square = 0.310), respectively. In summary, work efficiency of the Department of Rural Roads' staff does not rely solely on these factors, but there are other related factors that management/executives have to pay attention to in order to improve work efficiency.

Keywords- Achievement motivation, Creative behavior, Emotional intelligence, Work efficiency

INTRODUCTION

Background

Nowadays, the internal and external environments are rapidly changing due to various factors such as: the country's unstable economic situation, political unrests, changes of the world's economy, advantages in trade competition, societal changes, as well as the changes in working environment. This led to organizations changing and reforming their management structure, various policies and the structure of their organizations in accordance with the current changes. These changes affect organizations' staff, which has to adapt to newly changed and reformed policies and management structures. The changes surely have positive and negative impacts. Positive impacts are as followed: the organization's management will be more efficient; the staff will work attentively, enthusiastically and creatively. Moreover, they will be able to accept changes and share the same career goal. However, changes that happen too fast can lead to negative impacts on the organization. For example: the staff may not have the motivation to work nor a career goal, act out of line, get bored of work, and may lead to the decrease of work efficiency.

Although the organizations cannot control the external factors, they do have controls over internal factors. If the staff of an organization are a vital internal factor, then they must be educated, capable, skillful, and experts in order for an organization to be successful and prosperous. Staff with the aforementioned attributes will be important to the progress of an organization to success. Therefore, organizations, both governmental and non-governmental, deem human resource management highly important. Moreover, prompting motivation to work leads to achieving organization's goals, as well as analyzing various factors that impact the work efficiency of the organization's staff in order to improve: achievement motivation, creative behavior and emotional intelligence

factors, among other reasons. From the abovementioned information, the researcher became aware of the importance of various factors that have impacts on staff efficiency. Therefore, the researcher is interested in achievement motivations, creative behaviors and emotional intelligence factors, which affect the work staff efficiency of the Department of Rural Roads. The reason is that it is a not-for-profit government agency, and work according to the government's policy. Thus, the work efficiency must be accepted by the public. Hopefully, this research will be used as a suggestion or development of work process in order to improve efficiency and effectiveness in management.

LITERATURE REVIEW

Achievement motivation

Motivation is the basic drive for all of our actions. Motivation refers to the dynamics of our behavior, which involves our needs, desires, and ambitions in life. Achievement motivation is based on reaching success and achieving all of our aspirations in life. Achievement goals can affect the way a person performs a task and represent a desire to show competence (Harackiewicz *et al.*)[12]. McClelland's Achievement Motivation Theory [4] states that human has three basic motivators as followed: 1) achievement motivation is the need/desire to accomplish something; 2) affiliation motivation is the need/desire to be accepted by others and to be praised in a society/community/group. It is a motivation that makes people express themselves in order to be accepted. And 3) power motivation is the need/desire to be above others in a society or an organization. McClelland put emphasis on achievement motivation more than others, because it is the most related factor to success. Moreover, people with achievement motivations can be identified using the following three characteristics: 1) the need for achievement, 2) the need for affiliation, and 3) the need for power. Cassidy and Lynn [7] gathered theories on achievement motivations from many psychologists and presented a theory of their own. Subsequently, they created an achievement motive measure, which assesses six facets of achievement motivation: 1) work ethics, 2) reward, 3) excellence, 4) competitiveness, 5) status aspiration, and 6) mastery. Sprint Hall [9] defines achievement motivation as the need/desire to move up higher. Schultz [13] states that achievement motivation or the need for success is a characteristic of a successful executive, and it is a vital factor leading to the goal(s) they want.

Creative Behavior

Kleyzen and Street [17] creative behavior is show or action of a person in thinking and experimenting with new and useful things for use in the organization. Ford [11] giving meaning to creative behavior that an actions of person in the initiative of new things different from other things valuable or useful to the organization consists of creating feelings motivation as well as knowledge and ability. Georg and Zhou [16] described five facets of creative behaviors: 1) opportunity exploration, 2) generativity, 3) formative Investigation, 4) championing, and 5) application. Creative behavior is work to create new innovations of four facets: 1) opportunity exploration, 2) idea generation, 3) championing, and 4) application described by De Jong and Den Hartog [18].

Emotional Intelligence

Salovey and Mayer [8] were among the earliest to propose the name "emotional intelligence" to represent the ability of people to deal with their emotions. They defined emotional intelligence as "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions". Weisinger[14]described emotional intelligence as "the intelligent use of emotions: you intentionally make your emotions work for you by using them to help guide your behavior and thinking in ways that enhance your results" Goleman *et al.*[15] propose that emotional intelligence involves leadership competencies that can be categorized as self-awareness, self-management, social awareness, and relationship management. Goleman adopted Salovey and Mayer's definition, but expanded the construct to include a number of specific social and communication skills. He proposed that emotional intelligence involved abilities that can be categorized as self awareness, managing emotions, motivation, empathy, and social skills.

Work efficiency

Peterson & Plowman [1] states that there are 4 elements of work efficiency. The first one is quality. It is a quality that must be met by a producer in order to meet consumer's expectation. The result of the work must be correct, meet the standard(s), work swiftly and be beneficial to the organization. In addition, it must satisfy consumers or customers. Secondly, quantity is the number of tasks that are completed must match with the goal set by an organization. Moreover, the number of tasks completed must be consistent with the number of staffs. Thirdly, time means the amount of time spent on one task. It must be set in accordance to the nature of that particular task. There should be a development in techniques to make a task faster and more convenient in

comparison to task difficulties. Last but not least, cost means the expenses on a task must be appropriate to a task. In another word, the expense must be as least as possible to complete a task and a maximum profit. Moreover, efficiency in expenses and cost, such as human resources, materials, technologies and finance, must be economical and worthwhile. And there must be a plan before a task begins. Ryan & Smith [2] refer to human efficiency as the relation between efforts and costs put in a task positively. Personal tasks can be assessed by comparing the results of each task.

CONCEPTUAL MODEL AND HYPOTHESES

The research was aimed to investigate the achievement motivation factor, creative behavior and emotional intelligence affecting the work staff efficiency of the Department of Rural Roads and the research hypotheses were:

H1: Achievement motivation factors that affect work efficiency of the staff in the Department of Rural Roads.

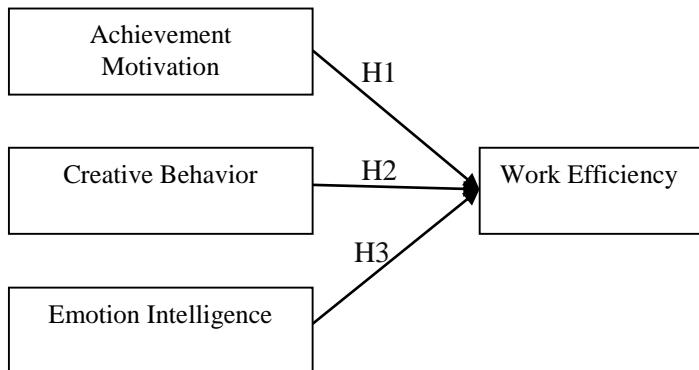
H2: Creative behavior factors that affect work efficiency of the staff in the Department of Rural Roads.

H3: Emotional intelligence factors that affect work efficiency of the staff in the Department of Rural Roads.

Table 1
Cronbach's Alpha Coefficient of Variables

Variables	Cronbach's Alpha
Achievement Motivation	0.843
Creative Behavior	0.910
Emotional Intelligence	0.921

Figure 1
The Research Conceptual Framework



The research hypotheses can be presented in the forms of structural in order to describe the relationship among variables and predict the dependent variable for hypotheses testing. The symbols used to represent the variables stated as follows:

AM	=	Achievement Motivation
CB	=	Creative Behavior
EI	=	Emotion Intelligence
WE	=	Work Efficiency

This research study aimed to achievement motivation factors, creative behaviors and emotional intelligence affect work efficiency of the staff in the Department of Rural Roads. The research study was a quantitative research method. The population of this research was 734 staff on Department of Rural Roads[20]. The samples of 254 respondents were determine by table of Krejcie & Morgan[3]. Data were collected through 5-point Likert scale questionnaire surveys. This research study was cross-sectional as the data were collected at a

single point of time from the key respondents. Content validity was applied to ensure the accuracy of an assessment tool. Cronbach's alpha was conducted to test for reliability with Cronbach's alpha coefficient of achievement motivation factor, creative behavior and emotional intelligence of 0.921, 0.910, and 0.843, respectively as shown in Table 1. The Cronbach's alpha value of the scale of all variables is greater than 0.700, so it shows that the scale has very good reliability. Data were analyzed by descriptive statistics including emotional intelligence, percentage, mean, standard deviation; and inferential statistics including the Pearson's Product-Moment Correlation and Multiple Regression Analysis. The research results can be significantly analyzed with 95% confidence interval.(Hair *et al.*)[19].

RESULTS

The research results were analyzed by using the statistical package for social science. The research findings and the hypotheses testing in this research study were presented as follows. This research received 220 returned questionnaires (from 259 samples), representing 84.90% considered acceptable if the questionnaire returned more than 50 percent recommended by Berdie *et al.*[6]. For description of the respondents, the research finding revealed that the survey data of work staff efficiency on Department of Rural Roads were made up of 53.60% male ages of the staffs were between 31-40 years up to 42.20%. They were in government staffs position up to 36.80%. The averages operating department up to 41.40% with 1-10 years experiences of 37.30%. The average monthly income is 10,000-20,000 Baht up to 48.20% as stated in Table 2.

Table 2
Description of the Respondent

Demographic Information				n=220
		Numbers of Respondents (NR)	Percentage of NR to Number of TR*	
Gender	Male	118	53.6%	
	Female	102	46.4%	
Age	21-30 Years	48	21.8%	
	31-40 Years	95	43.2%	
	41-50 Years	54	24.5%	
	51 Years or Above	23	10.5%	
Position	official	75	34.1%	
	government staffs	81	36.8%	
	permanent staff	64	29.1%	
Department	manager	14	6.4%	
	Administrative	73	33.2%	
	Operating	91	41.4%	
	Academic	42	19.1%	
Monthly Income	10,000-20,000 Bath	106	48.2%	
	20,001-30,000 Bath	72	32.7%	
	30,001 Bath or above	42	19.1%	
working experience	Less than 5 years	33	15.0%	
	5-10 Years	82	37.3%	
	11-15 Years	62	28.2%	
	Over 15 years	43	19.5%	

*TR = denote total respondents

Table 3
Correlation Analysis between independent Variables

	AM	CB	EI	WE
MEAN	4.44	4.25	4.36	
S.D.	0.507	0.436	0.367	
AM	1			
CB	0.719**	1		
EI	0.693**	0.813**	1	
WE	0.571**	0.704**	0.783**	1

**. Correlation is significant at the 0.01 level

Table 3 show the relationship between the independent variables that correlation coefficients (r) are exceed 0.800. As Hairet *et al.*[19] described the relationship between the variables that must be less than 0.800 otherwise it may cause Multicollinearity. This research shown that the relationship between the independent variables with the highest value of 0.811 (Emotional intelligence), which was exceed 0.800, accordingly the test for collinearity statistics of tolerance and VIF should be performed. The tolerance value was more than 0.200 and the VIF value was less than 10, recommended by Neter, Wasserman and Kutner [5] found that VIF has the lowest value of 2.230 and the maximum value of 3.415. Thus, multicollinearity problem was not found. It can be tested by using Multiple Regression Analysis, a linear model, to measure achievement motivation, creative behavior and emotional intelligence affect that work staff efficiency of the Department of Rural Roads.

H1: Achievement motivation factors affecting the work staff efficiency of the Department of Rural Roads.

Table 4
Achievement motivation affect that work staff efficiency of the Department of Rural Roads

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	Beta	Std.Error			
H1: AM → WE					
H1.1 : NA → WE	0.385	0.098	0.321	3.918	0.000*
H1.2 : NF → WE	0.052	0.095	0.045	0.552	0.581
H1.3 : NP → WE	0.295	0.077	0.288	3.825	0.000*
Adjusted R Square = 33.10%	Std. Error of Estimate 0.507			F=37.09	

Table 4 The H1 hypotheses testing found that three dimensions of achievement motivation factors can explain the work efficiency of the staff in the Department of Rural Roads up to 33.10% (Adjusted R-Square 0.331) at 0.05 significant levels. The achievement motivation dimensions of need for achievement and need for power had statistically significant direct affecting the work staff efficiency of the Department of Rural Roads with standardized coefficients (β) of 0.321 and 0.288, respectively

H2 :Creative behavior factors affecting the work staff efficiency of the Department of Rural Roads.

Table 5
Creative behavior effect that work efficiency of the staff in the Department of Rural Roads

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	Beta	Std.Error			
H2: CB → WE					
H2.1 : OE → WE	0.138	0.080	0.131	1.713	0.088
H2.2 : I → WE	0.190	0.085	0.212	2.223	0.027*
H2.3 : C → WE	0.052	0.062	0.066	0.838	0.403
H2.4 : App → WE	0.357	0.076	0.378	4.712	0.000**
Adjusted R Square = 50.40%	Std. Error of Estimate 0.436			F=56.57	

Table 5 The H2 hypotheses testing found that four dimensions of creative behavior factors can explain work efficiency of the staff in the Department of Rural Roads up to 50.40% (Adjusted R-Square 0.504) at 0.05 significant levels. The creative behavior dimensions of idea generation and application had statistically significant direct affect work efficiency of the staff in the Department of Rural Roads with standardized coefficients (β) of 0.378 and 0.212, respectively.

H3 :Emotional intelligence factors effecting the work staff efficiency of the Department of Rural Roads.

Table 6

Emotional intelligence affect that work staff efficiency of the staff in the Department of Rural Roads

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	Beta	Std.Error	Beta		
H3 : EI → WE					
H3.1 : Sa → WE	-0.040	0.069	-0.040	-0.581	0.562
H3.2 : Sr → WE	0.260	0.079	0.257	3.271	0.001*
H3.3 : M → WE	0.095	0.086	0.088	1.094	0.275
H3.4 : Em → WE	0.144	0.085	0.137	1.704	0.090
H3.5 : SS → WE	0.437	0.061	0.469	7.114	0.000**
Adjusted R Square = 64.90%	Std. Error of Estimate 0.367			F=81.83	

Table 6 The H3 hypotheses testing found that five dimensions of emotional intelligence factors can explain the work efficiency of the staff in the Department of Rural Roads up to 64.90% (Adjusted R-Square 0.649) at 0.05 significant levels. The emotional intelligence dimensions of managing emotions and handling Relationship had statistically significant direct affect work efficiency of the staff in the Department of Rural Roads with standardized coefficients (β) of 0.469 and 0.257, respectively.

In summary, from the hypothesis testing, it was found that creative behavior and emotional intelligence significantly affected the work efficiency of staffs in the Department of Rural Roads.

CONCLUSIONS

The objective of this research is to analyze achievement motivation factors, creative behaviors and emotional intelligence factors affect the work efficiency of the Department of Rural Roads' staff. The result finds that these factors have positive impacts on staff's work efficiency. Specifically, creative behaviors and emotional intelligence factors have direct relations to work efficiency, while achievement motive does not. Emotional intelligence, as a suggestion, management/executives can use this research as a guideline to improve and support the staff's work such as prompting motivation to work, seeking for ways to build up internal relations and work assessments for maximum profits for the organization, the public and the country's prosperity.

REFERENCES

- [1] Peteron, E., and Plowman, G. E.(1953), “Business organization and management(3rd ed.)”. *Illinios: Irwin*.
- [2] Ryan, T. A., and Smith, P. C.(1954), “Principle of industrial psychology”. *New York: The Mcnanla Press*.
- [3] Krejcie, R. V. and Morgan, D. W. (1970). “Determining Sample Size for Research Activities”,*Educational and Psychological Measurement*, 30(3), Pp. 607-610.
- [4] McClelland, D. C., Atkinson, J. W., Clark, R. A., and Lowell, E. L. (1976), “The achievement motivation” *Oxford, England: Irvington*.
- [5] Neter, J., Wasserman, W. and Kutner, M.H.(1985). “Applied Linear Statistical Model, Regression, Analysis of Variance, and Experimental Designs (second ed.)”,*Illions, USA Home Wood*.
- [6] Berdie, D.R.,Anderson,J.F. and Niebuhr, M.A.(1986). “Questionnaires: Design and Use(Second ed.)”, Metuchen, N.J.: *The Scarecrow Press,Inc*.
- [7]T. Cassidy R.and Lynn, (1989) “A Multifactorial Approach to Achievement Motivation: The Development of a Comprehensive Measure”, *Journal of Occupational Psychology*, Vol. 62, No. 4, pp. 301-312.

- [8] Salovey P, Mayer JD(1990), “Emotion Intelligence”, Imagination, cognition and personality. *New York Book*.
- [9] Sprinthall, N.A. and Sprinthall, R.C.(1990),“Education psychology : A Developmentapproach”,(5thed). *New York :Mcgraw-Hall*.
- [10] Goleman, D. (1995). “Emotional intelligence”. *New York: Bantam Books.*
- [11] Ford, C.M. (1996), “A theory of individual creative action in multiple social domains” *Academy of Management Journal*,Vol. 21, No. 4, Pp.1112 – 1142
- [12] Harackiewicz, J. M., Barron, K. E., Carter, S. M., Lehto, A. T., and Elliot, A. J. (1997). Predictors and consequences of achievement goals in the college classroom: Maintaining interest and making the grade. *Journal of Personality and Social Psychology*, 73, 1284-1295
- [13] Schultz, D. P., and Schultz, S. E. (1998),“Psychology and work today”,*New Jersey: Prentice Hall*.
- [14] Weisinger, H.(1998), “Emotional Intelligence at work”, the Untapped Edge of Success. *San Francisco: Jossey-Bass.*
- [15] Goleman, D., Boyatzis, R. E. and McKee, A. (2002). “Primal Leadership: Realizing the power of emotional intelligence”. *Boston: Harvard Business School Press*.
- [16] Georg, J. M., Zhou, J. (2001), “When job dissatisfaction leads to creativity: Encouraging the expression of Voice,” *Academy of Management Journal* Vol. 44, No. 4, Pp. 682-696
- [17] Kleysen R. F., and Street, C. T. (2001), “Toward a multi-dimensional measure of individual Innovation Behavior”,*Journal of Intellectual Capital* 2, Vol. 2, No. 3, Pp. 284-296
- [18] De Jong, J. P., and Den Hartog, D. N. (2008), “ Innovative work behavior: Measurement and validation” *EIM Business and Policy Research*, Pp. 1-27
- [19] Hair, J.F., Black, W.C., Babin, B.J.and Anderson, R.E. (2010). Multivariate data analysis.7thed. *Prentice Hall*, *EnglewoodCliffs*.
- [20] Department of Rural Roads.(2019),“Department of Rural Roads”, URL: http://www.drr.go.th/internal_unit.