

## **The Influence of Job Stress and Coping Strategies on the Work Efficiency of Call Center Employees at Telecommunication Company**

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*Keywords:* Job stress, Coping strategies, Telecommunication company

### **Introduction**

Job stress is a state of anxiety arisen when events and responsibilities exceed one's coping strategies (Lazarus quoted from Seaward, B.L. (1999: 5). It is related to working caused by internal external factors. The internal factors includes sickness, physical disorder etc. and the external factors are colleagues, work pressure etc. Job stress affected people both psychologically and physically, making them unhappy and sick. Some physical effects are headache, and sleeplessness (Charoenchue, 1999: 56 citing Hillary Jone, 1977: 109-112). The primary psychological effects are boring (Klaitong, 2002: 38 citing Doctor and Doctor) and here are 2 effects on emotion; anger and fear (Seaward, 1999: 91).

Not only does job stress affect humans physically and emotionally but also their work efficiency shown in some behaviors such as mistakes, bad decision making, poor concentration, low job quality etc (Nantawisit, 2003: 42-43 citing Schultz, 1998: 390-395). Suterland and Cooper (1991 quote in Travers and Cooper, 1996: 15) studied job stress and found that it affects working behavior. The effect size depends on stress level. Both high stress and moderate period of stress tend to produce low work efficiency (Permpian, 2002: 19-20 citing Robin, 1986: 386).

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There are many causes of job stress such as job characteristics, working role, organization intra-interrelations, professional development (supportive, safe) etc (Hellriegel, 1983: 492). Moreover, personal factors i.e. personality, beliefs etc. and organization and environment factors i.e. organization conflict, work stability, work pressure etc. are causes of job stress (Dubrin, 1984: 165-172). Altman and others (1985: 427-428) explained the relationship between 3 levels of stress and work effectiveness.

- 1) Low job stress: Low job stress will not challenge the workers, the person will be lazy, bored and not interested.
- 2) Medium job stress: when job stress increases, people will work efficiently because it stimulates them to work energetically and productively under appropriate stress levels.
- 3) High job stress, when coping with high stress levels for extended periods, the ability to manage external pressure decreases along with productivities. The workers may become bored and have a very difficult time to make decisions.

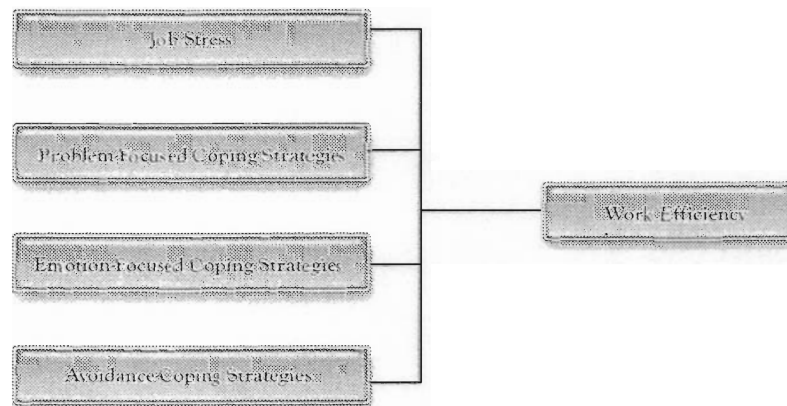
Individuals have different coping strategies. A coping strategy is a method for controlling or managing internal or external pressures stemming from job stress. (Folkman and Lazarus, 1980: 220). Lazarus (Rendall and Elizabeth, 1994: 6 citing Lazarus and Launier, 1978; Lazarus and Folkman, 1984) explained interaction among stress and coping strategies that the available resources for coping strategies have a strong influence on the future appraisal of the situations whether they are stressful. Jalowiec and others (1982: 137-161) discriminated 3 types of coping strategies.

- 1) A problem-focused coping strategy is a behavior to directly manage the response to job stress. It is the problem solving process to find a solution.
- 2) An emotion-focused coping strategy is a behavior to decrease pressures by managing emotions in the situation more than behavioral or situational management.

- 3) An avoidance-coping strategy is a behavior designed to avoid problems or situations by ignoring it and not taking any actions.

There are many causes of job stress and they differ based upon their working environment. Call center employees are responsible for all customer requests and emotions. Moreover, the organization development to be a one-stop service makes them have to know everything. They have to work 8 hrs/day and responded to more than 60 calls/day. This system creates a more complex work environment and effectively tend to increase job stress. Individuals have different coping strategies to manage job stress. Call center employees who manage their job stress well tend to have high work efficiency.

### Research Framework



This research aimed to study the relationship between job stress, coping strategies and work efficiency of call center employees at Telecommunication company. The research finding will be useful for the Telecommunication company and employees to develop themselves to cope with job stress and get their job done effectively.

### **Research Question**

What kinds of coping strategies of call center employees at Telecommunication company make them have high work efficiency?

### **Research Objective**

To compare work efficiency of call center employees who have different levels of coping strategies and job stress.

### **Research hypothesis**

Call center employees who have different levels of coping strategies and job stress have different work efficiencies.

### **Method**

#### *Participants*

The population and sample of the research consisted of 138 call center employees at True Corporation in 2006. 138 questionnaires were distributed and 93 questionnaires were returned (67.39%). There are 16 males and 77 females, 60 temporary employees and 33 permanent employees, 42 employees who have less than 1 year of work experience and 51 employees who have more than 1 year of work experience. The respondents were distributed into three groups; the high level of job stress group had 23, the medium level of job stress group had 42 and the low level of job stress group had 24.

#### *Measurements and Procedure*

#### *Variables*

There were 3 variables in this research as follows; coping strategies was an independent variable (problem-focused coping strategy, emotion-focused coping strategy, avoidance-coping strategy), job stress was a moderating variable (high, medium, low) and work efficiency was a dependent variable.

### Data Collection

The data was collected from 93 call center employees by questionnaires that contained four parts;

1. personal data (3 items, check list)
2. job stress (21 items, 5 level rating scale)(most-least) alpha .913
3. coping strategies (9 items)(problem-focused coping strategy, emotion-focused coping strategy, avoidance-coping strategy)
4. work efficiency (12 items, 5 level rating scale)(most-least) alpha .889

### Data Analysis

The data was analyzed by using SPSS for Windows. A frequency and percentage were used for analyzing personal data. Correlation and regression were used for analyzing relationship between job stress, coping strategies and work efficiency.

### Results

**Table 1:** Correlations coefficient between job stress, coping strategies and work efficiency.

	Emotion-focused coping strategy	Avoidance coping strategy	Job stress	Work efficiency
Problem-focused coping strategy	.276 (**)	-.134	-.265 (*)	.364 (**)
Emotion-focused coping strategy		.381 (**)	-.142	-.109
Avoidance-coping strategy			.156	-.326 (**)
Job stress				-.173

\*\* p < .01, \* p < .05

The results identified that the highest correlation coefficient between problem-focused coping strategy and job stress is negatively significant at .05 ( $r = .265$ ) and between those and work efficiency is positively significant at .01 ( $r = .364$ ). In contrast, the correlation coefficient between avoidance-coping strategy and work efficiency is negatively significant at .01 ( $r = .326$ ).

**Table 2:** Regression coefficient of job stress and coping strategies explained work efficiency.

	B	SE b	B	t	P
(Constant)	3.615	.427		8.469	.000
Problem-focused coping strategy	.413	.120	.354	3.432	.001
Emotion-focused coping strategy	-.150	.124	-.132	-1.206	.231
Avoidance-coping strategy	-.205	.101	-.219	-2.042	.044
job stress	-.050	.078	-.063	-.641	.523

$R = .475$

$R^2 = .225$

$F = 6.404$

$P = .000$  Sest = .464

The results show that the regression coefficient of job stress and coping strategies can explain work efficiency. Only problem-focused coping strategy can explain work efficiency positively at .05 significant level, ( $B = .354$ ) and avoidance-coping strategy can explain work efficiency negatively at .05 significant level ( $B = .219$ ). All predictors can explain work efficiency variance by 22.5% at .01 level.

Then, we analyzed multiple regression classified by job stress levels for investigating interaction effects among coping strategies and job stress on work efficiency. The results were shown that no predictors can explain work efficiency in all level of job stress. For next analysis, only coping strategies are taken to (no interaction among them) predict work efficiency classified by job stress level. The result was shown that in a high job stress level, there was no predictors could explain work efficiency at .05 significant level. All predictors could explain work efficiency

variance by 13.8%. In a medium job stress level, only avoidance-coping strategy could explain work efficiency negatively, at .05 significant level ( $B = -.356$ ). All predictors could explain work efficiency variance 20.5% at .05 significant level.

**Table 3:** Regression coefficient of job stress and coping strategies explained work efficiency in low job stress group.

	B	SE b	B	T	P
(Constant)	1.169	.975		1.199	.245
Problem-focused coping strategy	.965	.262	.827	3.686	.002
Emotion-focused coping strategy	.153	.208	.118	.735	.471
Avoidance-coping strategy	.061	.235	.060	.260	.798
R = .759      R <sup>2</sup> = .575      F = 8.585      P = .001      Sest = .414					

In a low job stress level, only problem-focused coping strategy can explain work efficiency positively at .01 significant level ( $B = .827$ ). All predictors can explain work efficiency variance by 57.5% at .01 significant level.

The results were shown that there are interaction effects of problem-focused coping strategy and job stress, of avoidance-coping strategy and job stress but not found an interaction between emotion-focused coping strategy and job stress. Then, a three-way ANOV is taken to compare the interaction effect of problem-focused coping strategy, avoidance-coping strategy and job stress on work efficiency between groups.

**Table 4:** Three-way ANOVA of work efficiency classified by problem-focused coping strategy, avoidance coping strategy and job stress.

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11.279 (a)	21	.537	2.891	.000
Intercept	1310.314	1	1310.314	7052.324	.000
NT_n	1.051	2	.525	2.828	.066
NT_n	1.038	2	.519	2.793	.068
S_NOMAL	.196	2	.098	.528	.592
NT_n*NT_n*S_NOMAL	1.465	3	.488	2.627	.057
NT_n*NT_n	1.121	4	.280	1.508	.209
NT_n*S_NOMAL	2.242	4	.560	3.016	.023
NT_n*S_NOMAL	2.151	4	.538	2.895	.028
Error	13.192	71	.186		
Total	1334.785	93			
Corrected Total	24.471	92			

a R<sup>2</sup> = .461 (Adjusted R<sup>2</sup> = .301)

The result indicated that there were interaction effects on work efficiency. The interaction effect of problem-focused coping strategy and job stress on work efficiency was measured at  $F = 3.016$ ,  $p = .023$  and the interaction effect of avoidance-focused coping strategy and job stress on work efficiency was measured at  $F = 2.895$ ,  $p = .028$ . Then we compared between-group for investigating the differences in each levels.

**Table 5:** Pairwise comparison of work efficiency classified by problem-focused coping strategy and job stress.

	Sum of Squares	df	Mean Square	F	Sig.	Post-Hoc
<b>High Job-Stress</b>						
Between Groups	.279	2	.140	.774	.474	
Within Groups	3.790	21	.180			
Total	4.069					
<b>Medium Job Stress</b>						
Between Groups	.081	2	.040	.144	.866	
Within Groups	12.081	43	.281			
Total	12.162	45				



Low Job Stress						
Between Groups	4.915	2	2.458	17.888	.000	High problem focused (4.2440) > medium problem focused (3.5208), low problem focused (3.1667)
Within Groups	2.748	20	.137			
Total	7.663	22				

The result was shown that in low job stress level, high problem focused coping strategy was higher work efficiency than another groups significantly at .01 ( $F = 17.888$ ).

**Table 6:** Pairwise comparison of work efficiency classified by avoidance-coping strategy and job stress.

	Sum of Squares	df	Mean Square	F	Sig.	Post-Hoc
High Job Stress						
Between Groups	.054	2	.027	.140	.870	
Within Groups	4.016	21	.191			
Total	4.069					
Medium Job Stress						
Between Groups	2.663	2	1.332	6.028	.005	Low avoidance (4.0648) > high avoidance (3.3167)
Within Groups	9.499	43	.221			
Total	12.162	45				
Low Job Stress						
Between Groups	1.644	2	.822	2.732	.089	
Within Groups	6.019	20	.301			
Total	7.663	22				

The result was shown that in medium job stress level, avoidance coping strategy was higher work efficiency than high avoidance coping strategy group significantly at .01 ( $F = 6.028$ ).

### Conclusion

There are interaction effects on work efficiency. The interaction effect of problem-focused coping strategy and job stress on work efficiency is measured at  $F = 3.016$ ,  $p = .023$  and the interaction effect of avoidance-focused coping strategy and job stress on work efficiency is measured at  $F = 2.895$ ,  $p = .028$ . In a low job stress level, employees with high problem-focused coping strategy display more work efficiency than others at .01 significant level ( $F = 17.888$ ). In a medium job stress level, employees with low avoidance-coping strategy display more work efficiency than employees in high avoidance-coping strategy group at .01 significant level ( $F = 6.028$ ).

### Discussion

The results show that the problem-focused coping strategy can explain work efficiency positively but the avoidance-coping strategy can explain work efficiency negatively. From research results, the call center employees use different coping strategies to cope with their job stress effectively but there is only problem-focused coping strategy affected work efficiency positively. The results confirm that in low job stress level, employees with problem-focused coping strategy tend to produce more work efficiency than others. It would be the best one for those groups. Because it can be able to deal with problems directly and help employees go across their obstacles to achieve goals. Moreover, the call center employees have working pattern according to job description of the company that control them cope their emotions without focusing on work which may miss the linkage between their stress and job. The correlation results show that the highest correlation coefficient between problem-focused coping strategy and job stress is negatively significant at .05 ( $r = .265$ ) and between those and work efficiency is positively significant at .01 ( $r = .364$ ). Obviously, the problem-focused coping strategy is the best one to cope with job stress if employees have low job stress and also help them get the job done effectively in the same time. But the avoidance-coping

strategy will be able to work well if they are in medium job stress and use less. Also it's not help to cope with their stress so that it's normally not useful for coping job stress and getting more work efficiency.

### Suggestions

From this research, we suggested for application to training and development efficiently. The call center officers should be train and develop to cope job stress by using problem focused coping strategy in order to work efficiently. For further research, factors/variables related coping strategies and job stress should be included such as causes of job stress, personality etc. Moreover, sample size limitation in this research should be considered.

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