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**RELATIONSHIP BETWEEN JOB STRESS AND FRAUD RISK ON  
EMPLOYEES AT THE NATIONAL EYE CENTER HOSPITAL X**

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**ABSTRACT**

**Background:** Fraud is any unlawful acts committed by individuals within an organization or institution to gain an illegal advantage of others through manipulation, falsifying truth and good behavior. On employees, pressure may cause fraud in part by problems stemming job stress from the work environment. The purpose of this study was to determine the relationship of job stress with the risk of fraud on employees.

**Methods:** The study design used cross sectional. Samples were employees in the Administration, Finance, Purchasing, Human Resources, Information and Technology, and Procurement at the National Eye Center Hospital X as many as 37 people. The sampling technique used in this study was proportional random sampling. Data was collected by questionnaire. Analysis of data was done through two stages, namely univariate to see the frequency distribution and bivariate to see the relationship (chi square).

**Results:** The result showed that  $H_0$  was rejected ( $p$ -value = 0.0001) meant that there was a relationship between job stress with the risk of fraud.

**Conclusion:** The relationship between job stress with the risk of fraud suggests the hospital to do the job stress measurement and risk of fraud continuous and reduce employees stress levels through strategies such as redesigning organizational approaches and participatory decision-making.

**Keywords:** Work stress, the risk of fraud, cross-sectional

**INTRODUCTION**

Fraud can be caused by three things according to ACFE, namely pressure, opportunity, and rationalization. Rationalization is hard to identify, the opportunity is the most fundamental cause of fraud, and pressure is a cause of fraud that most often occurs. Pressure can come from a variety of aspects such as economic demands or even lifestyle. On employees, pressures which causes fraud may be caused in part by stemming problems stemming from the work environment, which is called job stress [1-3].

Job stress is a process that causes people to feel sick, uncomfortable or tense because of work, work place or certain work situations[4]. Job stress can result in positive (eustress) that is needed to produce high achievement, but in general, job stress more self-harm workers and companies[5]. The negative impact caused by job stress may be symptoms of physiological, psychological, and behavioral[6].

In addition to the impact of the symptoms of physiological, psychological and behavioral, occupational stress can also have a negative impact on the organization or company[7]. Organizational impact is often caused by workplace stress is the decline in the quality of performance, high employee turnover, absenteeism at the workplace and reduced levels of job satisfaction. Organizational impact from the very first job stress felt by employees is job dissatisfaction, where job dissatisfaction is caused due to dissatisfaction of employees against the income or the salary they receive[5].

The survey results a foundation based in the city of Amsterdam, namely Wage Indicator Foundation, to workers in Indonesia in 2010 obtained the data that 50% (5,200) of workers are not satisfied with the income or the salary they receive, 19% (1,976) of workers were satisfied with the income or salaries they receive, and 31% (3,224) of workers no matter whether they are satisfied or not with their income. From the results of the survey states that most of the employees were dissatisfied with income or salary they get, this is because the income or salaries of employees feel they get are not in accordance with the pressure and burden on the working environment. While on the other hand employees are also faced with an unstable economic burden and always increasing. Situations like this may pose a risk of fraud in the labor force[8].

Hospital X is an institution belonging to the central government with the status of Public Service Agency (PSA) which is engaged in health services. In conducting business activities and organization, Hospital X involves many medical and non-medical employees to provide complete services to all the people of Indonesia. Based on data obtained from patients who visit the center of the Information and Technology at Hospital X, in 2014 the number of patient visits as many as 25 304 patients, which means that the average patient who should be served by employees is 2,108 patients per month.

Problems of organization or management are other consequences that must be faced by employees and in line with the stressors that arise and complexity of work faced by employees, it could potentially cause job stress and the risk of fraud on employees in the Hospital X, besides the lack of synchronization regulation between units - units of government involved in the management of the hospital as the Public Service Agency (PSA) such as regulations on the management of non-tax revenues (State Income Tax). Management of non-tax revenues in the PSA is not in line with Law No. 20 of 1997 on non-tax revenues, due to non-tax revenues of the PSA can be directly used to finance expenditure PSA either partially or completely. According to article 69 of Law 1 of 2004 on State Treasury emphatically stated that the PSA revenues in connection with services provided along with grants and donations obtained can be used directly to finance spending PSA is concerned, as well as in Article 16, paragraph 1 PP 23, 2005[9].

As stipulated by the Law non-tax revenues and Treasury Law, all non-tax revenues must be paid directly to the state treasury as soon as possible so as to imply that the government is not allowed to perform non-receipt or collection of funds budgeter. If the concept of cash receipts done by simultaneous PSA seen from these two laws then this will cause confusion. This can be an opportunity (opportunities) of the cause of fraud.

## **METHODS**

Design of this research is analytic survey with the type of research design used is cross sectional study (cross-sectional). The reason researchers use the design of this study is to examine the relationship between the independent variables (job stress) with the dependent variable (the risk of fraud) without any treatment or intervention, as well as the measurement of independent and dependent variables is done only once and at the same time. The population in this study are all non-

medical employees in Hospital X Bandung, as many as 110 people. Samples are part of the population that is expected to represent or representative of the population, by using purposive sampling technique, the sample size is as much as 37 people with the following inclusion criteria:

- Samples are employees in Administration, Finance, Purchasing, Human Resources, Information and Technology, and Procurement.
- Sample are employees who have worked for at least 5 years in Administration, Finance, Purchasing, Human Resources, Information and Technology, and Procurement.

This analysis was conducted to determine the relationship between job stress with the risk of fraud on employees at Hospital X. The statistical Chi Square test in this research.

## RESULTS

### *Job stress and the risk of fraud in the respondents*

Table 1. Distribution of the frequency of job stress and the risk of fraud at Hospital X in 2015.

Variables	Frequencies	Percentage (%)
<b>Job Stress</b>		
Mild	11	29,7
Moderate	26	70,3
Total	37	100
<b>Fraud Risk</b>		
Low	19	51,4
Moderate	18	48,6
Total	37	100

Based on the analysis results in Table 1 shows that out of 37 employees, the vast majority of employees (70.3%) had moderate job stress and the majority of employees (48.6%) had a moderate risk of fraud.

### *Relationship between job stress and risk of fraud on employees at Hospital X in 2015*

Table 2 Relationship between job stress & fraud risk on employees at Hospital X in 2015.

Job Stress	Fraud Risk				Total	P Value	PR 95% CI	
	Low		Moderate					
	N	%	N	%	N	%		
<b>Mild</b>	9	81,8	2	18,2	11	100	0,040	2,127 (1,215 –
<b>Moderate</b>	10	38,5	16	61,5	26	100		3,725 )
<b>Total</b>	19	51,4	18	48,6	37	100		

Based on the analysis of job stress relationship with the risk of fraud in Table 2, it shows that of the 11 employees who experience mild job stress at moderate risk of fraud were 2 employees (18.2%) while the 26 employees who experience moderate job stress at moderate fraud risk were 16 employees (61.5%). Statistical test results obtained p value = 0.040 ( $p \leq 0.05$ ), it can be concluded that there is a significant relationship between job stress with the risk of fraud. Then, from the analysis results obtained PR = 2,127 means that employees who experience moderate job stress have 2 times more likely to have a risk of fraud as compared to employees who experience mild job stress.

## **DISCUSSION**

### ***Work stress experience***

Job stress is a condition that causes employees to feel pressured and uncomfortable to change that occur in the workplace because of the knowledge and capabilities of the employees are not in accordance with the stressors that must be addressed so that employees are not able to cope with these conditions, and based on research results showed that out of 37 employees at Hospital X mostly experiencing work stress were as many as 26 employees (70.3%).

Work stress experienced by each employee are different from each other, this is caused by several factors such as expressed by Robbins, among other organizational factors (including the demands of work and a heavy workload, work that requires responsibility high demands of the role, the demand among individuals, as well as the organizational structure), environmental factors (including social, political, and technological), and individual factors (including family issues and economic issues) [6].

Based on the results of the research, employees who experience moderate job stress (75.7%) was largely fueled by the conflict in the workplace such as a dispute with a fellow coworkers working unit or with other work units, disagreements between co-workers, the gap in the workplace, the debate between teamwork, coordination of information between teams working in inadequate and lack of unity among the working team that eventually became stressor occurrence of work stress on employees at Hospital X.

### ***Work placement determines stress level***

The results showed that from six units at Hospital X, Finance section is the first rank with employees who are experiencing moderate job stress was the highest 12 out of 21 employees (57.14%) and parts of procurement section is a first rank with employees who are experiencing mild job stress, include 5 of 16 employees (31.25%).

In theory, there is no theory reveal which parts have high levels of job stress highest and lowest, but based journal research entitled Individual Differences and Occupational Stress Perceived: A Croatian Survey, shows that employees in one company in the country Croatia, who works in finance ranked eighth experiencing job stress among 9 other work units (parts Cooperation Operations, Procurement, Production, Sales, Accounts, Marketing, Human Resource, and other work unit), it appears that the difference in ratings between research and journal [10]. This is possible because the stressor earned by each employees are different in each work unit and in every workplace is different [6].

According to the Chief of Mobilization Fund reveal the reason for the first rank of Finance because employees in Finance section have responsibility and different moral burden borne from other work units. Every month, employees at the Finance shall prepare a monthly report on the mobilization of funds in and out to be checked and approved by the head of which would then be examined by an independent team of Internal Control Unit (ICU) and the Corruption Eradication Commission (CEC), as well as the Supervisory Board (SB) every 1 years. But for the head section, every week on Monday get an inspection by the Corruption Eradication Commission (CEC). In addition, financial officers often have to work overtime to complete the billing claims of health insurance.

Moreover, according to the Head of Procurement reveal that reason Procurement Section be ranked first by the number of employees who experience mild job stress the most, due to the work done requires high concentration and accuracy in checking the item number and specifications of the

procurement of goods and services, in addition to the regulations made by government regarding the procurement of goods and services often change so that employees decreased ability to concentrate while working for a lot of things into the mind of an employee who subsequently cause job stress on employees.

### ***Risk of fraud on employees***

Based on the results of the research showed that the majority of the 37 employees at Hospital X has a low risk of fraud as many as 19 employees (51.4%). Fraud is any unlawful acts committed by individuals within an organization or institution to gain an illegal advantage of others through manipulation, falsifying truth and good behavior is more deliberate.

Until now there is no theory that definitively reveals the risk of fraud on employees, one of which may be due to the risk of fraud which is owned by each employee is different and the differences between the employees in a unit with other work units, this is a cause of fraud risk in each work unit not always same.

There are three causes of fraud on employees, namely pressure, opportunity and rationalization, hereinafter known as the Fraud Triangle. Rationalization is the cause of fraud the most difficult to identify, the opportunity is the most fundamental cause of fraud, and pressure is a cause of fraud most often occurs[6].

### ***Risk of fraud in different work unit***

The results showed that of the six units at the Hospital X, part of Finance section is the first rank with employees who have the highest risk of fraud was 8 of 18 employees (44.44%) and a unit with a rating first with employees who have a low risk of fraud, include 6 of 19 employees (31.57%).

Finance section was the first rank with low and moderate fraud risk, according to the Internal Control Unit (SPI) due to the separation of duties between the officer and the officer authorizing the payment of the purchase as well as the lack of adequate physical security in money and file storage an important file.

In theory no one has revealed the work unit where the risk of fraud the highest and lowest on the employees, but those mentioned above may be a possibility of fraud such as probability theory expressed that the opportunities are factors that most underlying fraud and can appear at any time that is needed oversight and internal controls [5].

### ***The relationship between job stress and risk of fraud on employees***

Results of the analysis of relationship between job stress and risk of fraud was found that of 11 employees who experience mild job stress at moderate risk of fraud was that 2 employees (18.2%) while the 26 employees who experience moderate job stress at moderate risk of fraud was that 16 employees ( 61.5%).

Statistical test results obtained  $p$  value = 0.040 ( $p \leq 0.05$ ), it can be concluded that there is a significant relationship between job stress and the risk of fraud. In Table 2 shows that employees who experience mild job stress has a lower risk of fraud than that experienced moderate job stress, this shows job stress is directly proportional to the risk of fraud, so that, higher the stress level of employee the risk of fraud would be even higher and the lower the level of work stress, the lower the risk of fraud which is owned by employees.

Work stress is the response of workers that might arise if the job demands and stressors received does not match with the knowledge and capabilities of workers, so that workers are not able to cope with the situation(11). There are a lot of stressors or causes of job stress on employees, that

organizational factors, environmental factors and individual factors are factors that causes job stress. Meanwhile, reveals that causes job stress that the conditions of work, role conflict, career development and organizational structure[6]. Meanwhile, based on the results of research, the causes of work stress on employees at Hospital X is a conflict at work, problems at work, workloads and responsibilities, activities other than work, lack of social support, lack of ability to concentrate, environment work, and state of health, where the conflict in the workplace is a factor contributing to high job stress in 28 (75.7%) of employees at Hospital X and general health of employees is a factor causing low of job stress 2 (5,4%) employees.

Revealed that the stress of work will have an impact on employee behavior as the behavior of sabotage at work, increased aggressiveness, vandalism, crime, etc., while referring to the results of research showing that a significant relationship between work stress with the risk of fraud[12]. So, it is proved that one act of criminality which is the impact of job stress is fraud or risk of fraud prior to the occurrence of fraud, because fraud itself in Indonesia is one of the criminal act, as stated in Article 378 of the Penal Code and article 55 of the Criminal Code, where any fraud perpetrators will be prosecuted criminal penalties are imprisonment of at least 4 years and a minimum fine of 1 billion rupiah. But criminal penalties and fines may change depending on the demands of the Public Prosecutor and the Judge, in addition to the analysis results obtained  $PR = 2,127$  means that employees who experience moderate job stress were 2 times more likely to have a risk of fraud as compared to employees who are experiencing mild job stress.

Therefore, to reduce the risk of fraud it should also reduce the causes of job stress, because of factors that cause or trigger the onset of job stress would be a trigger anyway to the risk of fraud prior to the occurrence of fraud.

However, based on research results obtained in Table 4.2 also result, employees who experience mild job stress turned out to have a moderate risk of fraud. These results are inversely if associated with the relationship between job stress and the risk of fraud, if employees experiencing job stress was low, the risk of fraud would be low and vice versa.

This may be related to individual personality which is easily stressed when faced some pressure and some are able to cope with such pressure so that the lower stress level then likely if the level of job stress on employees are different though to faced same stressors.

Likewise, the risk of fraud may be happened before researchers conducted the study, the risk of fraud on the employee directly proportional to the level of stress but when the researchers conducted a study on the results of these employees become inversely. This can be due to causes or triggers other fraud as stated is the pressure (economic demands; lifestyle; etc.), opportunity and rationalization. So if are associated with job stress relationship with the risk of fraud, it remains proportional.

## **CONCLUSION AND RECOMMENDATION**

Most of the 37 employees of which 26 employees (70.3%) had moderate work stress, and 11 employees (29.7%) had mild work stress. Based on the work unit, category of job stress being experienced by employees is most numerous in the Finance and minor categories of job stress experienced by employees are most numerous in the procurement. Most of the 37 employees of which 18 employees (48.6%) had a moderate risk of fraud, and 19 employees (51.4%) had a lower risk of fraud and based on the work unit, employees who have a low risk of fraud and were most numerous in the Finance section. There is a relationship between job stress and fraud risk ( $p\text{-value} = 0.040$ ).

The hospital is expected to perform measurement job stress and the risk of fraud in the continuum and evaluate the results of this study as prevention of fraud at the Hospital X. In addition, the hospital is expected to reduce the stress levels of employees with activities that are positive and strengthen solidarity between employees such as outbound, brisk walking, recreation with family among employees and gathering, as well as the hospital can do stress management work through multiple strategies approach organizations such as the selection and redeployment, job redesign, participatory decision-making, organizational communication and welfare programs.

## REFERENCES

- [1] ACFE. What is Fraud [Internet]. 2015. Available from: <http://www.acfe.com/risk-assessment-m1.aspx>
- [2] ACFE. The Fraud Tree [Internet]. 2015. Available from: <http://www.acfe.com/fraud-tree.aspx>
- [3] ACFE. The Fraud Triangle [Internet]. 2015. Available from: <http://www.acfe.com/fraud-triangle.aspx>
- [4] Beehr, Terry A.; Franz TM. The Current Debate About the Meaning of Job Stress. *J Organ Behav Manage.* 1986;8(2):5–18.
- [5] Munandar. Psikologi Industri dan Organisasi. Jakarta: UI Press; 2008.
- [6] Stephen, P. Robbins; Timothy AJ. Perilaku Organisasi. Second. Jakarta: Salemba Empat; 2008.
- [7] Abdul M. Perilaku dan Manajemen Organisasi. Jakarta: Erlangga; 2008.
- [8] WageIndicator Foundation. Survey Salary In 64 Countries [Internet]. Wage Indicator Foundation. 2015 [cited 2015 Mar 13]. Available from: <http://www.stamplive.com/apu.php?n=&zoneid=8191&cb=759295030&p%0Aopunder=1&direct=1%0A>
- [9] Constitution number 20 year 1997 about Non-tax Revenue [Internet]. 1997. Available from: <http://www.hukumonline.com/pusatdata/detail/227/node/594/uu-no-20-tahun-1997-penerimaan-negara-bukan-pajak>
- [10] Pološki Vokiae N, Bogdaniae A. Individual Differences and Occupational Stress Perceived: A Croatian Survey. *Zagreb Int Rev Econ Bus.* 2008;11(1):61–79.
- [11] NSW Departement of Community. Guide to Fraud Risk Assessment [Internet]. 2015. Available from: [http://www.community.nsw.gov.au/doeswr/\\_assets/main/documents/fraud\\_risk\\_guideto.pdf](http://www.community.nsw.gov.au/doeswr/_assets/main/documents/fraud_risk_guideto.pdf)
- [12] Rini JF. Stress Kerja [Internet]. 2002 [cited 2015 Mar 11]. Available from: <http://www.e-psikologi.com/artikel/organisasiindustri/stress-kerja/>