# THE EFFECT OF OCCUPATIONAL WORK SAFETYAND HEALTH PROGRAM, AND MOTIVATION ON EMPLOYEE'S PRODUCTIVITY AAT HOTEL THE PARK LANE JAKARTA

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#### **ABSTRACT**

**Purpose**- The purpose of this study was to analyze the influence of work occupational Health and Safety program, work Motivation on Employees's Productivity in The Park Lane Jakarta **Design/methology/approach**- The research method used by distributing questionnaire to 88 respondents of employee of The Park Lane Hotel Jakarta

**Findings-**. The results in this study stated that the Occupational Health, Safety(OHS), and Motivation have individually and simultaneously effected Employees work productivity. The individual effects in weak category when it is tested individually by coefficient of coorelation and determinant. On the other hand, the variables have effected work productivity when it is done simultaneously.

**Research limitations**- Limitation in this research is the absence of financial report for at least, the past three years in a row. These reports are useful to coorelate between the findings and the financial benefit to the company. The financial ratios are useful to meaure the coorelation of the human capital policy against profitability of the Park Lane Hotel

**Practical implications-** Occupational Health and Safety program and work motivation also have simultaneously significantly on the Employee Productivity, provide that information and training are taking place on the importance of personal protective eqquipment.

**Key words**: Safety, environment, health, motivation, productivity, employees.

#### Introduction

Competition is a nature of business. At the initial period, an innovator in a particular business can enjoy a grace period of time, to earn maximum profit. One can enjoy as a leading producer or service provider in a certain type of product, or service, as a benefit of any pioneer. However, it is not last forever. An imitator will follow at the minimum time, cost of research and development. At nowdays, due to technology advancement, the people oriented company gear up the knowledge based company.

Samsung company has proved this advantage to succeed mobile phones business against Nokia, the legend. In this particular reason, human resource as the prime mover of an organization for profitability and sustainability. Improving

their health, safety are regarded to increase their productivity. It is found by Puspitasari in her research that health, mental health, and attitude are the factors in increasing employee's productivity[1].

# Theoritical Framework, and Hypotheses Development

# Health and Safety at Workplace

ISO 18001 version 2007 on Occupational, Health, and Safety Management System has defined in its clause that A Management system includes organizational structure, planning activities (including for example, risk assessment and the setting of objectives), responsibilities , practices, procedures, process and resources. In this system there are a set of

elements to use. It is also mandatory for management to establish policy to achieve those objectives as set in every element of the system[2]. It is also proposed by Rivai that any fisiological effects of workforce are based on environment conditions. The said environment can includes a place at work, tools, oxygen circulation, lighting system, and physical condition of employees themselves[3].

The government has issued a set of regulations since 1996 through Labour Ministry Regulation Number 05 in 1996 on Health, and Safety Audit System to measure the employee's productivity. Regulation is aimed to reduce staff's turnover, and absenteeism. It is also aimed to increase working environment, and staff productivity[4].

The regulation iof the Ministry of Labour was based on the State Law Number 1 in 1970 on Work Safety. Additionally, it is also supported by another state law Number 1 in 1992 on Social Welfare's Guarantee for the Workforce. All of these regulation including other technicalities regulations are aimed to boost the real assurance on workforce as prime of the organization[5]. guarantee of zero accident against the following definition such as an accident is undesired event that result in physical harm to a person or damage to property. One of the fulfillment of regulations is that Personal Protective Equipment(PPE) are mandatory to be in place. It is usually the result of a contact with a source of energy (kinectic. electrical. chemical. thermal[6]. It is therefore hyphothesized that Work Safety Program has a postive effect on productivity.

H<sub>1</sub>: Work Safety Program has a positive effect on productivity.

#### **Health at Workplace**

Healthy people at work give more contribution to increase productivity. The jargon says that "Good Health is Good Business". Physical condition is an indicator of health at work place[7]. The more specific indicators at work place are less absenteeism, zero accident, and less sickness of employees, either physically, or mentally[8]. However, the emergency is sometimes unavoidable, but it shall be conducted in proper treatment to get sooner recovery and safety[9]. The prevention is preferable to avoid any unintended accident of damage[10].

The Japanese management has introduced 5S, since long time to prevent any misuses, misconducts of any tools, and equipment to prevent time consuming, and effectivity of tools and equipment in an office. There are some steps to prevent any accident, loss, and damage. These are substitution of dangerous tools, isolation of dangerous tools and equipment to be seperated than the other. The important one after application is monitoring of dangerous goods, tools, and equipment. The usage of self protection, installation of direction and warning at work place. The last one but not limited to, is the execution of training and education of Occupational Health and Safety to all staff. In oil company such as Chevron, for instance, this training and certification is mandatory for every staff and management. No excemption on this matter. It is therefore hyphotesized that Work Health Program has a postive effect on productivity.

H<sub>2</sub>: Work Health Program has a positive effect on productivity

#### **Motivation**

Motivation is derived from Latin word of *movere*, means drive or to put into action. The resource, in this case a human resurce is needed to be pushed by a kind, and a series of soft measure to maximize the effort to produce maximum output for the benefit of all parties, including emplyees themserves. Stanford that "Motivation as an energizing condition of the organism that serves to direct that

organism toward the goal of a certain class" [11]. Hence, it is a condition to move a man to get to goal or destination. In this case, motivation is a prime, of somebody reason to move [12]. On top of this reason, it is probably one of the ERG theory by Herzberg, which eillingness to grow as the main reason of action or motivation. Mc Clelland also notice that motivation is necessary to have achievement as people need recognition from outside his ownself, that is the management. It is therefore hyphotesized that work motivation has a positive effect on productivity

H<sub>3</sub>: Work Motivation has a positive effect on productivity

#### **Productivity**

Productivity is the measurement of the amount of input to attain the amount of output. This comparison is the performance or productivity. The benchmark used is a previous data, or the comparison beween the same input against output of a different person. Productivity should be quantified to make it easy and measurement tools, consistently [13]. Based on this method the related staff or supervisor can have the fair assessement on the result produced by all employees. Type of productivity can be categorized as ratio of productivity, ratio of partial productivity [14]. This is also applied to meaure efficiency of resources used to produce goods or services.

It is sometime a marketing officer has a conflict with accounting staff on this matter. As the behavior of salesman, for instance is to sell as many as possible with as cheap as possible aiming to market penetration. In this case, fullfilment of rules and regulation in a company is put aside. This is a cause of conflict among the different tasks or division in a company. The productivity is also aimed to enrich the awareness, exploitation of chance, attaining feedback, and a means of integrity. The Program of health and safety have a significant effect on productivity in a weak state, and so the motivation. However if both in simultaneous one, in fact, there are direct positive errcet, significantly[15], as drawn hereinunder.

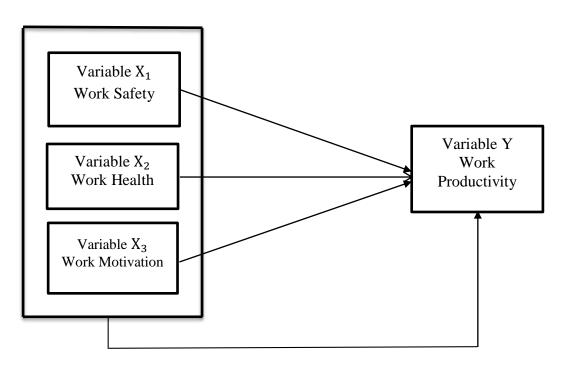


Figure 1. Conceptual Framework

# Population, Sample, and Method of Analysis

The total staffs of The Park Lane hotel are 300 as the population of this research. It is purposively taken 100 respondents as the sample [16], with non Probability Sampling Technique. While the analysis done by multiple regression by SPSS version 20.

#### **Findings and Discussions**

#### Validity and Reliability

The validity of instrument is tested as presented hereinunder.

**Table 1 Validity Test** 

Variable	Responden	Not Valid	Valid							
Work Safety	10	0	10							
Work Health	10	0	10							
Work Motivation	10	0	10							
Produktivity	10	0	10							

Source: Questionaire, analyzed

Reliability of the instrument is tested as hereunder.

**Table 2 Result of Reliability** 

Variable	Responden	Alpa	Conclusion
Work Safety	10	0.992	Reliable
Work Health	10	0.957	Reliable
Work	10	0.893	Reliable
Motivation			
Produktivity	10	0.910	Reliable

Source: Questionaire, analyzed

#### **Profile of Respondent**

**Table 3 Respondent Based On Gender** 

Gender	Frequency	Percentage
Male	63	71.60
Female	25	28.40
Total	88	100

Source: Questionaire, analyzed

The management of the hotel was not included in the research on the plan of human resource. However, by nature of work of 3 shifts, male are preferable to be in a bigger ratio than female.

On the following table, the majority of age lies at 31 to 47 year-old. This figure represent the age of the hotel that more than 10 years with less of turnover. In the mean time the workforce from 20 to 30 years old prepared as back up for the future.

**Table 4 Respondent By Age** 

Age by Year	Frequency	Percentage
<20	1	1.14
20-30	23	26.14
31-40	47	53.41
41-50	14	15.90
>50	3	3.41
Total	88	100

Source: Questionaire, analyzed

The above age represent 70% are the people from 20 up to 40 persons. The further capacity development are still possible to be taken, based on selective basis.

Table 5 Respondent Based On Education

Education	Frequency	Percentage
High School	46	52.27
Diploma 3	29	32.96
Bachelor	12	13.64
Master	1	1.13
Total	88	100

Source: Questionaire, analyzed

Composition of staff with diploma three is a kind of strong human resource. It is necessary to describe the length of working period in this hotel, as presented hereunder.

Employee that have been working more than 10 years are 48.87%. It represent the harmony in industrial relations in this hotel. This length of service shows the loyality, but not productivity yet.

Table 6 Respondent Based On Length of Service

N	DCI VICC											
Length by Year	Frequency	Percentage										
<1	3	3.40										
1-5	22	25.00										
5-10	20	22.73										
>10	43	48.87										
Total	88	100										

Source: Questionaire, analyzed

The above result is needed to prove their loyality by length of service, and the following analysis is the prove of their position at present.

**Table 7 Respondent Based On Position** 

Age by Year	Frequency	Percentage
Staff	41	46.59
Leader	10	11.36

Supervisor	22	25.00
Manager	13	14.78
Director	2	2.27
Total	88	100

Source: Questionaire, analyzed

%

0,00 0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

0,00

The ratio between the supervisor and that staff is 1 to 4. Every one supervisor lead 4 staff. This status is due to their seniority and need to prove their productivity in the end part of this discussions[17].

 $\mathbf{S}$ TS **STS** SS No Program % % % Self Protection Tool is properly used based on Standard Operational 57,00 64,77 30,00 34,09 1,00 1,14 0,00 0,00 Procedure (SOP) Safety First Staff need to know the 0,00 0,00 62,00 70,45 24,00 27,27 2,00 2,27 0,00 0,00 importance of OHS OHS **Program** 3 increase staff productivity 52,00 59,09 35,00 39,77 1,00 1,14 0,00 0,00 0,00 0,00 to achieve company goals Conformance of staff's 25,00 0,00 4 competency against the 60,00 68,18 28,41 3,00 3,41 0,00 0,00 0,00 tasks 40,00 5 Periodical training is held 45,45 47,00 53,41 1,00 1,14 0,00 0,00 0,00 0,00

52,00

51,00

47,00

37,00

48,00

59,09

57,95

53,41

42,05

54,55

34,00

34,00

38,00

51,00

36,00

38,64

38,64

43,18

57,95

40,91

2,00

3,00

3,00

0,00

4,00

2,27

3,41

3,41

0,00

4,55

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0,00

Table 8 Result of Descriptive On Work Safety(X<sub>1</sub>)

Staff capacity Source: Questionaire, analyzed

doing tasks

9

10

held

OHS Program encourage 6 the staff's discipline in

Marking of dangerous or

Work load in line with

warning is installed Staffs feel confortable at

good environment Monitoring

The results shows that 98,86% of the employees of Hotel The Park Lane Jakarta have wore the Self-protection tools as set

consistenly

out in accordance with Standar Operational Procedur (SOP) Safety First. It is continued to the second variable [18].

Table 9 Descriptive analysis of Work Variable (X<sub>2</sub>)

No	Pemograman -	S	SS		S		KS		TS		STS	
		F	%	f	%	F	%	f	%	f	%	

1	Company provide assurance toward employees	64,00	72,73	23,00	26,14	1,00	1,14	0,00	0,00	0,00	0,00
2	First Aid is provided	57,00	64,77	27,00	30,68	4,00	4,55	0,00	0,00	0,00	0,00
3	Treatment on staffs is in place	62,00	70,45	23,00	26,14	3,00	3,41	0,00	0,00	0,00	0,00
4	Periodical medical check-up is conducted	56,00	63,64	27,00	30,68	5,00	5,68	0,00	0,00	0,00	0,00
5	All employees have been covered by Health insurance	59,00	67,05	25,00	28,41	4,00	4,55	0,00	0,00	0,00	0,00
6	Company conduct refreshment on OHS	40,00	45,45	44,00	50,00	4,00	4,55	0,00	0,00	0,00	0,00
7	Staff should be aware of the implementation of OHS	57,00	64,77	25,00	28,41	6,00	6,82	0,00	0,00	0,00	0,00
8	Good food to guarantee the Health and fitness	57,00	64,77	27,00	30,68	4,00	4,55	0,00	0,00	0,00	0,00
9	Unstable emotional as the consequences heavy jobs	51,00	57,95	33,00	37,50	4,00	4,55	0,00	0,00	0,00	0,00
10	Preventive action against accident and damage in place	51,00	57,95	35,00	39,77	2,00	2,27	0,00	0,00	0,00	0,00

Source: Questionaire, analyzed

The management have taken all prevention facilities. This is due to awareness on employee's protection on health and safety [19]. The availability of

those training, tools and equipment are needed to check its effect on motivation. As motivation is necessary to increase productivity.

**Table 10 Descriptive Analysis on Work Motivation (X3)** 

No	Program	S	S	,	S	KS		T	S	STS	
No		f	%	f	%	f	%	f	%	f	%
1	I am proud to be working in this company	38,00	43,18	50,00	56,82	0,00	0,00	0,00	0,00	0,00	0,00
2	Recognition on high achievement motivate me to work in here	56,00	63,64	32,00	36,36	0,00	0,00	0,00	0,00	0,00	0,00
3	The availability of facilities make me encouraged to be working in here.	42,00	47,73	46,00	52,27	0,00	0,00	0,00	0,00	0,00	0,00
4	We have the chance to have career development	32,00	36,36	54,00	61,36	2,00	2,27	0,00	0,00	0,00	0,00
5	Social interaction is solid that make me happy	50,00	56,82	38,00	43,18	0,00	0,00	0,00	0,00	0,00	0,00
6	I am ready for additional tasks aiming to develop skills and career	25,00	28,41	59,00	67,05	4,00	4,55	0,00	0,00	0,00	0,00
7	I am motivated to work harder to a better achievement	49,00	55,68	39,00	44,32	0,00	0,00	0,00	0,00	0,00	0,00
8	I always do my best to be better than others	44,00	50,00	43,00	48,86	1,00	1,14	0,00	0,00	0,00	0,00
Next 7											
9	The present salaries I got matched with my responsibility	23,00	26,14	63,00	71,59	2,00	2,27	0,00	0,00	0,00	0,00

Source: Questionaire, analyzed

The result of analysis attained all in high percentage that represent all staffs are well motivated. This motivation is

necessary to be checked if any coorelation with productivity. The analysis is drawn hereinafter.

**Table 11 Descriptive analysis on work motivation (Y)** 

No	Drogram	SS			S		KS		TS		STS	
No	Program	f	%	f	%	F	%	f	%	f	%	
1	Qualification on education are in line with their responsibilities and tasks	23,00	26,14	62,00	70,45	3,00	3,41	0,00	0,00	0,00	0,00	
2	I always in cooperation with others to accomplish the tasks	32,00	36,36	56,00	63,64	0,00	0,00	0,00	0,00	0,00	0,00	
3	The given instruction in line with SOP	30,00	34,09	58,00	65,91	0,00	0,00	0,00	0,00	0,00	0,00	
4	Staff is not necessary to be monitor in get things done	33,00	37,50	55,00	62,50	0,00	0,00	0,00	0,00	0,00	0,00	
5	Staff owned competencies to accomplish the job effectively	36,00	40,91	52,00	59,09	0,00	0,00	0,00	0,00	0,00	0,00	
6	The staffs work based on team work.	42,00	47,73	46,00	52,27	0,00	0,00	0,00	0,00	0,00	0,00	
7	High discipline in place in doing their job	33,00	37,50	54,00	61,36	1,00	1,14	0,00	0,00	0,00	0,00	
8	Staff in good attitude in doing their job	45,00	51,14	43,00	48,86	0,00	0,00	0,00	0,00	0,00	0,00	
9	High discipline has effected the performance	46,00	52,27	42,00	47,73	0,00	0,00	0,00	0,00	0,00	0,00	
10	The staff always in good manner to accomplish the job.	38,00	43,18	49,00	55,68	1,00	1,14	0,00	0,00	0,00	0,00	

Source: Questionaire, analyzed

It is found that motivation to grow as proposed by Frederick Herzberg as the factors to accomplish the tasks. The achievement followed by recognition, and other rewards can last longer to gera up the productivity of all employees as the scores are nearly to 100%. Hence OHs on productivity is tested by classic assumptions, as presented below.

		Unstandardized Residual
N		88
Normal	Mean	,000
Parameters <sup>a,b</sup>	Std. Deviation	1,627
Most	Absolute	,099
Extreme	Positive	,046
Differences	Negative	-,099
Kolmogorov-Smirnov Z		,929
Asymp. Sig. (2-tailed)		,354

**Test of Data Normality** 

**Table 12 Normality** 

The extreme on the positive side is 0,046, and the most extreme negatic is -0,099. This Kolmogorov-Smirnov test using SPSS version 20, Alpha,  $\alpha = 0.05$  (5%) fount that the value of Kolmogorov-Smirnov test, Z=0,929, with the value of

significance 0,354>0,05. This is to prove that data is normally distributed.

### **Multikolinierity Test**

**Table 13 Inter Variable Multikolinierity Test** 

Table 13	mici varian	ic muiti	Rollinci ity i est
Variable	Tolerance	VIF	Conclusion
Safety	,436	2,291	Non Multikolinierity
Health	,428	2,336	Non Multikolinierity
Motivation	,492	2,031	Non Multikolinierity

By method of Variance Inflation Factor (VIF), with the value criteria at VIF<10. It is concluded that all result in the above table are less than 10, It means that no inter valiable's multicolinearity.

### Heteroscedastisity

The following date are scattered along the table. It is the prove that mo heteroscedasticity in these variables.

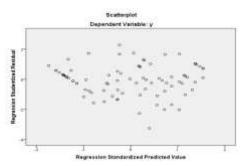


Figure 2 The Scatterred Diagram

Having done all tests as presented above, the last one is linearity test, as follows.

#### Linearity

Linearity in independent variable by t-test.

**Table 14 Linearity** 

Variable	Methods	Sum of Squares	df	Mean Square	F	Sig.
Safety	Deviation from Linearity	57,541	12	4,795	,852	,598
Health	Deviation from Linearity	25,486	11	2,317	,381	,960
Motivaton	Deviation from Linearity	53,635	10	5,363	1,455	,173

All independent variables have no linearity against dependent variable as the values are significant above 0.05. It means the linearity is insignificant.

# Goodness of Fit Test of Model Conformance by Anova test

Anova test is aimed to check whether all independent variables have effected productivity, simultaneously. F-test using SPSS-20. The result of R2<sup>^</sup> (JKR) is 854,661. By degree of freedom (df) is 3. So the means divided by three which is 284.887. In the meantime the residucal means is 230,3edom (df) 84. Consequently the square of means is 2.742. Having this two elements, the regression square of means by F-test is  $F_{hitung} = \frac{284,887}{2,742} = 103,898$ .

Table 15 Analisys of Variancee (ANOVA)lerance

					,	
Mo	del	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	854,661	3	284,887	103,898	,000b

Residual	230,327	84	2,742
Total	1084,989	87	

Now the comparison of F-test value by 5% deviation of tolerance  $\alpha = 5\%$  (0.05), df1 = 3, df2 = 84, it is found that the value of  $F_{(5\%,3,84)} = 2,713$ . It is therefore concluded that  $F_{test} > F_{table}$  (103,898> 2.713). This is to explain that  $H_0$  is rejected and  $H_a$  is accepted. The conclusion can be drawn that the regression model can be applied to check the effect of

Work Health, Safety, and Motivation against Productivity.

## **Multiple Linear Regression Model**

The application of SPSS version 20, this software produce the model of Work Health, Safety, and Motivation against Productivity.

**Table 16 Multiple Linear Regression Model** 

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	-,054	2,518		-,021	,983
Safety	,237	,071	,253	3,322	,001
Health	,218	,075	,223	2,900	,005
Motivation	,523	,072	,519	7,244	,000

Source: Data, analyzed and synthesized

The synthesis of the finding is presented as below: Productivity= -0.054+0.237 Safety+0.237 Health+0.523 Motivation  $+\varepsilon$ .

The value of constanta will be the value to reduce productivity if the safety is not in place. It reflecting how important the safety itself to be maintained by the management of The Park Lane hotel. While the value of safety by 0,237 explaining that if the safety increased by one unit, the productivity will be increased by 0,237 times. The coefficient of Health at the amount of 0,218 means that every increment of one unit of Health will multiply the productivity by the number of 0,218 times, provided that other variable in ceteris paribus.

The regression coefficient of motivation at the amount of 0,523 has a meaning that if any increasing of one unit in motivation of eomployees, the productivity is increased too. The amount on increasing is similar by 0.523 times that means it has a full positive decoding received and implemented by employees.

## Partial Variable by t-test

By SPSS version 20, the t-test is run to analyze the partial effect of every variable against productivity. The output are as shown in table below.

Table 17 Multiple Linear Regression
Model by t-test

Model	by t test
t	Sig
-,021	,983
3,322	,005
2,900	,001
7,244	,000

Source: Data analyzed

On the above table the t- value-s is 3.322 significant at 0.001. It is significant by 0.005 which is less than 0.05. In this case,  $H_1$  is accepted that means safety has positively effected productivity, partially.

On the above table the t- value-s is 2,900 significant at 0.000. It is significant by 0.001 which is less than 0.05. In this case,  $H_1$  is accepted that means health has positively effected productivity, partially[21].

On the above table the t- value-s is 7,244 significant at 0.001. It is significant by 0.001 which is less than 0.05. In this

case,  $H_1$  is accepted that means motivation has positively effected productivity, partially. However it is necessary to the

next step in analyzing the coorelation coefficient and determinant coefficient [22].

**Table 18 Coorelation Coefficient and Determinant Coefficient** 

Variable	Coefisient Coorelation	Category	Determinant Coeffient	Significant	Conclusion
Safety	,302	Lemah	9,102	,005	Real
Health	,341	Lemah	11,611	,001	Real
Motivation	,620	Kuat	38,453	,000	Real
Simultant	,888	Sangat Kuat	78,854	0,000	Real

The conclusion of the above coefficient and determinant are real. However, if it is categorized by each variable of safety, health, and motivation, individually is in a weak category. These three variables together, simultaneously have effected productivity strongly. This result can be synthesized that none of this variable can be disregarded, when management of Park Lane hotel set the goal of productivity and sustainability[23].

# Conclusion, Limitation, and Future Reseach

The management of Park Lane hotel has created the sustainable company by developing human resource in this hotel. The human capital are regularly invested, and kept by high commitment in maintaining the ratio of high qualification employees against operators level, by 1 to 4 ratio. This ratio has contributed to high span of control, quality service by solid teamworks. The key in maintaining these are Safety, Health, and Motivation.

Limitation in this research is the absence of financial report for at least, the past three years in a row. These reports are useful to coorelate between the findings and the financial benefit to the company.

While for the future research, this coorelation can be completed by inclusion of financial ratio of the Park Lane Hotel. The ratios are useful to meaure the coorelation of the human capital policy against profitability of the Park Lane Hotel.

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