



## Impact of Occupational Safety and Health on Employees' Performance at Zanzibar Government Printing Press in Unguja-Zanzibar

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**ABSTRACT:** The purpose of this study was to assess the Impact of Occupational Safety and Health on Employees' Performance at Zanzibar Government Printing Press (ZGPP) in Unguja. The specific objectives of this study were to assess how work environment affects employees' performance at the ZGPP, to examine how precautionary measures of occupational health may improve employees' performance and to assess how Occupational Health hampers employees' performance at the ZGPP. The study adopted descriptive study design, while self-administered questionnaires were used to collect data from the respondents. This study covered the staff of Zanzibar Government Printing Press (ZGPP) who were simple randomly selected from a sample frame of 127. A total of 106 respondents were selected for the study. Data was analyzed using Statistical Packages for Social Science (SPSS) to capture the impact of Occupational Safety and Health on Employees' Performance at ZGPP and regression model was used for data processing and analysis of the relationship between the variables. The findings of the study showed that, just more than half (63.4%) of the respondents were male, the study also revealed that, about 44.6% of the respondents lacked knowledge of OSH. However, liner regression analysis was done to establish the relationship between the independent and dependent variables. The study discovered that, variable of working condition had strong relationship ( $\beta = 0.468$ ,  $t = 5.273$ ,  $p < 0.05$ ) on employees' performance with the significance level of  $p < 0.05$ . The study also revealed that, Occupational Health had significant effect ( $\beta = 0.246$ ,  $t = 2.521$ ,  $p < 0.05$ ) on employees' performance at ZGPP. Additionally, it was also discovered that, there was no work place precautionary measures addressed ( $\beta = 0.087$ ,  $t = 0.868$ ,  $p > 0.05$ ) on employees' performance. Although these findings showed that work place precautionary measure had negative effect on employees' performance at ZGPP. Thus, it was recommended that, ZGPP should focus more on the protection and prevention of OSH, improve occupational health in terms of training of OSH, enforcement of regulation and policy of OSH continuously towards employees' performance. As the study design was descriptive in nature and could not establish causality and temporality, an in-depth longitudinal follow up study would be recommended to yield better association.

**KEY WORDS:** Employees' performance, Occupational safety and health.

### 1. INTRODUCTION

Occupational Safety and Health (OSH) is the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in occupations (Fanning, 2017). Globally, countries have put in force Occupational Safety and Health measures for the employees' performance in organizations. In many European and American countries originally, OSH modeled after the 17<sup>th</sup> Century in 1884 Factory Act, which was the first OSH Act but did not protect workers. So, employee performance remained unclear.

In 1966, hazardous accidents and bad working environment prevailed and they caused death of workers in industries. In the 18<sup>th</sup> and the 19<sup>th</sup> centuries, the problem of OSH worsened due to the emergence of the industrial revolution. Nevertheless, every year, 2.2 million men and women were destitute of that right of occupational accidents and work-related diseases. It is estimated that, workers suffered 270 million occupational accidents, 160 million occupational diseases each year coupled with poor occupational health that reduced working capacity of workers, (ILO, 2013).



Benjamin, (2001) showed that, in Europe each year, occupational hazards killed 5,000 skilled workers especially in accidents at work and about 5 million of workers were affected in work accidents.

In African, many countries have been well known for poor occupational safety and health. Despite numerous occupational health and safety advances in recent years, several occupational health and safety issues still existed in most African countries between 2000 and 2003. ILO (2013) reported that, 15 countries were exposed to dangerous chemicals with no protection. All along, there have been illness, injuries and other work related accidents that have increased by 20-30% particularly among technical workers. It is however absurd to note that, in many countries, the underlying causes, prevention and impact of most of the occupational injuries are neither well recognized nor recorded. It was against this background that this study was designed especially in Zanzibar's public and private sectors analyzing the impact of occupational safety and health on employees' performance at Zanzibar Government Printing Press.

## 2. LITERATURE REVIEW

### 2.1 Occupational Safety and Health

According to Nawwas et.al., (2018), Occupational Health and Safety is a multi- disciplinary practice dealing in all aspects of health and safety at the work place with a strong focus on preventing work place hazards. Ibid et.al., (2018) argued that, work environment is suitable in providing employees' performance, which contribute towards reducing pressure and stress of employees and enable them work effectively at the level of 67 % as well as reducing absenteeism at the level of 33%.

Shikdar and Sawaqed (2017) argued that work environment affects employees' performance in an organization. They argued that, 66% work environment and proper personal protective equipment used are among the aspects that affect employees' performance. They also argued that, about 34% managers received complaints from employees with illnesses related to headache, back pain and upper body pain. Therefore, it is obviously clear that work environment, occupational health and precautionary measures are significant for employees' effective work execution.

### 2.2 Employee Performance

Employee Performance refers to real work accomplished by individuals. Performance (work performance) relates to either the quality or quantity of work attained by employees while executing their duties and responsibilities (Luthans, 2011).

In addition, Kanten (2013) argues that, there is a strong association among working conditions, safety behavior, safety environment, work injuries and accidents with employees' performance. This relationship is up to the tune of 57% of those employees who have suffered occupational injuries due to the use of machines and equipment at work places.

Mohammad and Susanty (2016), argued that, there is a positive influence of safety and health on the employees' performance whereby poor or absence of safety and health decrease employee productivity.

Sgroi (2015) argues that, happiness makes people more beneficial at work, investing in health promotion is a way of increasing employee performance and reducing absenteeism, through this, employees' performance improves with efficient and effectiveness of service delivery leading to attainment of organizational goal.

## 3. METHODOLOGY

The study was carried out at Zanzibar Government Printing Press (ZGPP) in Unguja – Zanzibar. It is located at Maruhubi in West “B” District of Unguja - Zanzibar. This study used descriptive research design with a quantitative approach. 106 Questionnaires were distributed for data collection and only 5 questionnaires were not received. Respondents were categorized by gender, age, level of education and working experience. The Yamane 1967 formula version 20 was used to calculate the size of the sample which was 106. Random sampling technique was used to select the sample of the respondents. Data analysis was done with the help of SPSS version 20 and regression.



**4. RESULTS AND DISCUSSION**

**4.1 Demographic of the Respondents**

A total of 106 questionnaires was distributed to the respondents and 100 equal to (94.33%) were completely filled and returned and only 6 equal to (5.66%) questionnaires were not returned.

**4.2 Demographic Profile of the Respondents**

In this study, demographic information of the of respondents comprised of gender, age, level of educations, working experience and work department of respond regardless of any bias with the consideration that influence occupational safety and health on employees’ performance at ZGPP. Their profile is illustrated in Table 1.

**Table 1:** Demographic features of the Respondents

Variable	Feature	Percentage (%)
Gender	Male	63.4%
	Female	36.6%
Age	21-30	16.8%
	31-40	24.8%
	41-50	49.5%
	51 and above	8.9%
Level of Education	Certificate	40.6%
	Diploma	23.8%
	Degree	31.7%
	Master	4.0%
Departments	Factory Operational	58.4
	Planning and Administration	32.7
	Marketing, Public Relation, Central store for office equipment and stationary	8.9
Working experience	1-5	25.7
	6-10	11.9
	11-15	14.9
	16 and above	47.5

Source: Field data, 2022

Table 1 showed that, more than half (63.4%) of the respondents were male. Therefore, this implied that, there was a big gender difference in all departments of the study. Hence, the influence of occupational safety and health concern was more among male workers compared to their counterparts, the females at ZGPP. The demographic characteristics of the respondents’ age group ranged between 21 years to above 51 years. The age groups of the respondents 21-30, was (16.8%), 31-40 was (24.8%), 41-50 was (49.5%) and 51 and above was (8.9%). This implied that, the study involved different categories of age with no biasness that influenced occupational safety and health on employees’ performance at ZGPP.

On distribution of respondents’ educational level, Table 1 also showed that (40.6%) had certificates, (23.8%) had diplomas, (31.7%) of respondents were degree holders and 4 (4%) of respondents were master level. These results showed that, a large number of respondents who participated in the study involved different levels of education with capacity to ably answer questions on occupational safety and health on employees’ performance at ZGPP.

Majority of the respondents were from the Department of Factory Operations and they were (58.4%), followed by Department of Planning and Administration with (32.7%) and (8.9%) from Department of Marketing, Public Relations, Central Store for Office



and Equipment and Stationeries. The study found out that majority of the respondents were from the Department of Factory Operations majority of whose staff usually use chemicals and machines at ZGPP.

Table 1 is also reflective of work experience of the respondents and it showed that, (47.5%) of the respondents had working experience of 16 years and above, whereby (14.9%) had working experience of more than 10 years, (11.9%) respondents worked for a period ranging from 6-10 and about (25.7%) of respondents had 1-5 work experience. Majority of the respondents who administered the questionnaire had long experience at place of work. Hence, had enough experience to share reliable information on occupational safety and health on employees’ performance at ZGPP.

In accordance with Table 1 still, it was discovered that, at ZGPP, 8 equal to (7.9%) of respondents strongly agreed that, conducive work environment increased employee commitment, 45 equal to (44.6%) of respondents agreed, 24 equal to (23.8%) of respondents were uncertain, 10 equal to (9.9%) of respondents disagreed with the statement and 14 equal to (13.9%) of respondents strongly disagreed. Therefore, employees’ commitment influenced by conducive work environment at the organization precipitated increased employee commitment at place of work.

Table 1 also shows that, knowledge of OSH was very low to the staff of ZGPP since the findings revealed that, 45 equal to (44.6%) of respondents did not understand the terms of OSH and only 5 equal to (5.0%) of respondents strongly agreed that, they had a knowledge of OSH and 29 equal to (28.7%) of respondents agreed that they understood the term of OSH and 21.8% were not sure and this was directly from the results on training which showed that, 21 equal to (20.8%) of the respondents agreed on the provision of OSH training. Table 2 is illustrative of coefficient results:-

**Table 2:** Influence of independent variable on dependent variable

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.665	.677		2.459	.016
Work Environment	.640	.130	.434	4.923	.000
Occupational Health	.308	.168	.162	1.835	.069
Precautionary Measure	.431	.192	.194	2.246	.027

a. Dependent Variable: Employee Performance

Table 2 shows 0.05 level of confidence, this implies that, two independent variables that are work environment ( $\beta = 0.640$ ,  $t = 4.923$ ,  $p < 0.05$ ) and precautionary measures ( $\beta = 0.431$ ,  $t = 2.246$ ,  $p < 0.05$ ) and it has a significant effect on dependent variable which is employees’ performance. Work environment has a positive effect on employee performance. Performance of employees increases by 0.640 units in an improved work environment, while precautionary measures increase by 0.431 units of the score. This presupposes that, work environment and precautionary measures at work places are key factors.

The study findings showed some consistent with other previous studies like the study by Lelo, & Purba, (2018) which found out that, there was positive effect between work environment on employee performance by increasing the 0.638 unit of score. When work environment becomes better, the performance of employees too increases and improves.

Similarly, study by Irawati, et.al., (2019) also revealed that, variable of work environment which is independent variable on employees’ performance which is dependent variable increases by 0.016 unit of score. It shows that, variable gives a significant effect to employees’ performance.

Comparing the study by Gamal, et.al., (2018) which found out that, work environment had negative effect on employee performance. It was revealed that, work environment through job satisfaction has the greatest influence on employee performance rather than work environment and employee performance.



The study by Harini & Yani, (2019), discovered that, precautionary measure had a correlation of ( $r=.391$ ,  $p$  value  $=.000<0.05$ ) which shows that, work place precautionary measure which involved protective equipment had significant relationship with employees performance. This presupposes that, there is statistically significant relationship between implementation of rehabilitative measures and the employees' performance. It is proved that, implementation of precautionary measures had significant relationship with employees' performance towards achieving the goals of an organization.

However, the results also indicate that, one independent variable that is occupational health ( $\beta = 0.308$ ,  $t = 1.835$ ,  $p > 0.05$ ) did not show any significant effect on employees' performance. The test, measured by 0.05 level of confidence result shows that, occupational health appears to be greater than  $p$ -value. It indicates that, there are some encounters in occupational health such as training the employees to get awareness on the knowledge of occupational health.

Occupational Health had a positive effect on employee performance. If Occupational Health is better, the employee performance will increase by units 0.466 of the score. This implies that, when employees enjoy better health, safe environment is likely to lead to improve the performance of employees is obtained and achieving the settled goals of the organization becomes real.

The study done by Nuryanti, et.al., (2021) discovered that, occupational health had positive effect on employee performance by 20.1%. This result too presupposes that, occupational health is very vital in the performance of employees at work places. This is so because the workers require better health and safe environment to perform to their level best. Hence, leading to attainment of objectives and goals of an organization. Mwaruta, (2013) revealed that, occupational health had positive effect on employee performance. There was strong relationship between variables. It was about 95% confidence level.

## 5. CONCLUSION

The study indicates that, safe and health work place is vital for employee performance. Therefore, based on the findings, management should play a vital role to assure the safety and health of employees for their continuous effective work execution. This ensures achievement of organizational goals. Work environment ( $\beta = 0.640$ ,  $t = 4.923$ ,  $p < 0.05$ ) and precautionary measures ( $\beta = 0.431$ ,  $t = 2.246$ ,  $p < 0.05$ ) have a significant effect on dependent variable which is employees' performance. Work environment has a positive effect on employee performance.

## 6. RECOMMENDATIONS

Firstly, the ZGPP should continue providing employee proper personal protective equipment (PPPE) in order to improve precautionary measures and proper use of chemical, machines and equipment which result into low rate of the cases of work accident, injuries, disease and this results into good performance of the employees. Hence, aiding the firm to achieve its set objectives and goals.

Secondly, the ZGPP should provide conducive work environment for employees specifically to those who work with the Department of Factory Administration to reduce risks of injuries, accidents and disease emanating from heavy machines and chemicals. Such a conducive work environment shall also help to curb down the rate of staff absenteeism and turn over. Hence, improvement on employees' performance.

Lastly, likewise, the ZGPP should improve the occupational health in terms of training of OSH, enforcement of regulation and policy of OSH in order to avoid injuries, accidents and disease for better health because these hamper employee performance.

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