

Training as a Vital Safety Intervention Activity for Employees' Job Commitment: A Case Study of Steel Factory

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ABSTRACT

The need for human resources, otherwise referred to as employees, in the effective running of any establishment cannot be over-emphasized, especially in steel factories. Likewise, the effect of training as one of the vital safety intervention activities on accident rate reduction is highly imperative. Thus, its effect on the rate of employees' commitment to the job is understudied. Therefore, this study investigated the effect of training as one of the key safety intervention activities on the employees' commitment to the job. This study adopted the participatory approach, and the stakeholders, who are 67 employees of the steel factory, were considered for questionnaire administration and interview. This study sought information on the respondents' demographic characteristics, activities carried out, safety management, and influence on job commitments. Data collected were statistically analyzed using the SPSS 20.0 version. The respondents' ages are normally distributed around 26 – 35 and 36 – 45 age brackets, with 56.72 and 31.34 %, respectively. The majority (36 %) of this factory's employees were in the manufacturing and melting unit, while the least (16 %) were in the packaging unit. The following percent, 7.46 and 44.78 %, strongly agreed and agreed to the management's provision of safety induction and training, while only 37.31 % disagreed. The study established that training intervention has a positive influence on the job commitment of factory employees. Thus, about 93% of the workers believed that safety training should be given priority over PPE or incentive/motivation.

Keywords: Safety Management, Job Commitment, Factory Employees, Influence, Steel.

Aims Research Journal Reference Format:

Ajayeoba A. O., Fajobi M. O., Raheem W. A., Adebiji K. A., Okuma S. O., Fatukasi S. O. & Ajayeoba, A.S. (2022): Training as a Vital Safety Intervention Activity for Employees' Job Commitment. *Advances in Multidisciplinary and Scientific Research*. Vol. 9. No. 1, Pp 37-50. www.isteams.net/aimsjournal. [dx.doi.org/10.22624/AIMS/V9N1P3x](https://doi.org/10.22624/AIMS/V9N1P3x)

1. INTRODUCTION

The need for human resources, otherwise referred to as employees, in the effective running of any establishment cannot be overemphasized.

In carrying out any task within the establishment, separating the employees from organizational safety is quite tedious. Occupational accidents severely deteriorate human capital and negatively affect countries' productivity and competitiveness. Thus, proper safety management will tremendously boost the employees' morale (Jain and Kaur, 2014) and protect the workers, equipment, and the establishment's assets as good safety policies are one of the areas of strength of an organization for a positive relationship between total quality management and organizational performance (Cherian et. al., 2021).

Facilitating a safer and healthy environment for each employee and overall human resources protection is essential (Makhamara and Simiyu, 2016), thus, it is one of the basic duties of the employer to ensure safety in the workplace (Małysa, 2022). Industrial activities are accompanied by a series of activities such as manufacturing, processes, sorting, and cutting, among others. The activities are carried out at the various units of the factory such as truck loading and unloading bays, sorting unit, melting and manufacturing operations unit, and packaging unit. These activities are reported to have the potential of posing the employees to risk if not adequately managed and may result in accidents with significant adverse consequences.

Safety and risk management measures, occupational safety and health guidelines, and organizational safety provisions have indirect effects on employee job performance. The level of employees' commitment impacts organizational productivity and performance as health and safety needs are part of what determines employees' perception of the quality of work life (Kim, et.al., 2021). However, poor safety practices in the safety management system lead to poor commitment due to poor concentration (Imran et al., 2010). Hence, proper safety tools must be implemented to increase the workers' morale which will always lead to increased productivity. Furthermore, due to the peculiarities in the steel manufacturing industry, workers are exposed to unsafe working conditions. Thus, these factory activities require a condition where employees can carry out their work and be free from possible accidents (Umugwaneza et al., 2019).

According to Dwomoh et al. (2013), occupational safety should not be seen only from the socioeconomic and political perspective alone but as a fundamental human right of any employee. The mental and health stability of the employee directly affects performance in the discharge of duties. Mwangi and Waiganjo (2017) reported that the concept of Occupational Safety and Health (OSH) is a relatively new phenomenon (though known worldwide) because, during the industrial revolution, labour activities pointed out the problems of workplace or OSH, showing interest in health and safety-related problems of the workforce. From such an assertion, many sectors began to embrace the concept of occupational safety. Therefore, the effects and influence of occupational safety have been investigated in manufacturing industries, health service institutions, the educational sector, the timber industry, tower projects, the flour industry, steel manufacturing companies, and logistics services, amongst others (Afful-broni, 2012; Ndegwa et al., 2014). The occurrence of accidents or occupational diseases can result in death, the experience of disability, and temporary illness that can make an employee not work properly. Therefore, the employee's productivity level will reduce drastically compared to healthy time. Hence, necessary safety programme activities should be implemented to avert these occurrences.

These safety programme activities/interventions were classified by Adebisi and Charles-Owaba (2009) into six safety activities: Training (Tr), Machine Guarding (MG), Safety Awareness Creation (SAC), Accident Investigation (AI), Incentive/Motivation (IM), and Personal Protective Equipment (PPE). Among these interventions, training and the use of PPE (Adebisi and Onawumi, 2014; Ajayeoba et al., 2019) or Training and Publicity (Hale et al., (2010) were found to be the major safety interventions for accident prevention. Training has been established as the primary intervention for accident prevention in any safety management system. However, its effect as a safety intervention programme, has not been established on the employees' job commitment. One of the solutions that have an impact to improve safety is the application of safety management system elements along with the measures to reduce the risk of an accident (Małysa and Gajdzik 2021). Also, the safety management system (SMS) elements vary from organization to organization (Elsebaei et al., 2020). Some key elements of SMS are safety policy, safety assurance, safety risk management, and safety promotion/training (Gunaseelan and Gerald, 2017). Figure 1 shows that training is the intercept element between the SMS and the safety activities.

2. METHODOLOGY

The study carried out a pilot survey to determine the preferred safety activities (as suggested by Adebisi and Charles-Owaba (2009)) of the 67 factory workers (52 casual workers and 15 permanent workers) of a steel factory (located in Lagos) likely influence their job commitment. Informed consent was obtained from the respondents after the importance of the study was explained to them. First, a simple question was asked: *Arrange the safety activities on a scale of 1 – 5 (1 indicating the least and five as the most preferred). The arrangement was according to their effects on the employees' commitment*

This question was asked before, and after detailed information about each safety activity was discussed. A questionnaire was then developed around the preferred safety activity after the information about each safety activity was discussed with them. A structured questionnaire was designed to garner information on the demographic data of the respondents, such as gender, age, marital status, level of education, literacy, work hours per day, work hours per week, number of co-employees, year of experience in the

Job, and position in the job. Also, various activities in different factory units were evaluated, and training was carried out to enhance employees' job commitment and a satisfactory level of safety practices and job commitment. The data were analyzed and summarized for easy comprehensiveness using frequencies and percentages as the statistical indices. The results were further interpreted and discussed appropriately, while previous results were used as the basis for validation. Finally, it was necessary to ensure that the instruments and methods adopted were reproducible elsewhere.



Figure 1: Relationship between the Safety Management System and the safety activities (Present Study, 2022)

3. RESULTS AND DISCUSSION

3.1 Demographic information of the respondents

Figure 2 shows that PPE and AI have the highest and lowest number of responses before discussing the information about each safety activity. The results were based on their initial knowledge of what safety is. The results after the information about each safety activity were discussed show that training had 52 responses, i.e., 78% of the workers believed that safety training would improve their morale and increase their job commitment which will, in turn, have positive effects on productivity. The staff working in the factory were categorized under the job status as permanent (52) and casual (15) staff summing up to 67 respondents considered.

Among these, 20 working at the Truck Loading and Unloading Bays (TLUB), 12 at the Sorting Unit (SU), 24 at the Melting and Manufacturing Operations Unit (MMOU), and 11 at the Packaging Unit (PU) of the factory (Figure 3). Table 1 presents the summary of the demographic information of the respondents. The demographic characteristics of the factory employees include gender, job status, age, educational qualification, marital status, and year of service. The population studied was predominantly male, with 100 % male. Factory job activities are energy-demanding and require able-bodied with good physiques. The finding suggests that the job is occupied by men as totally not accommodating any female.

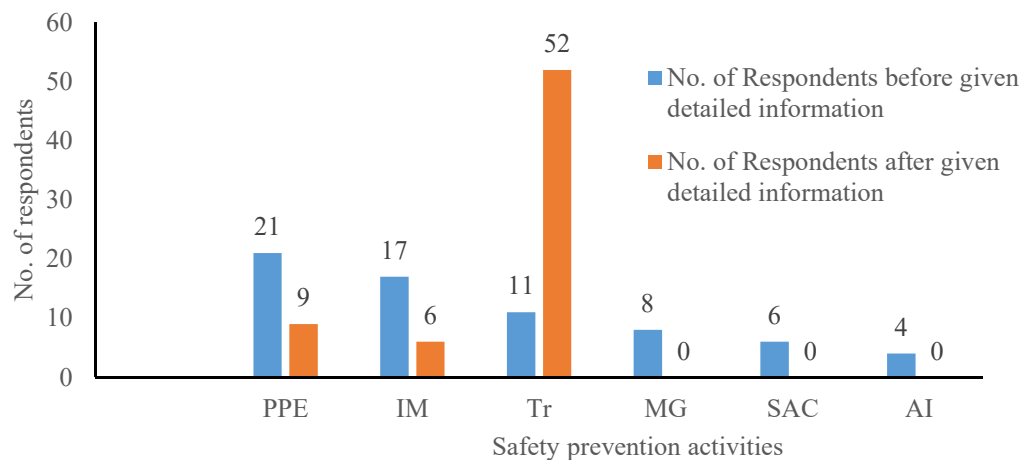


Figure 2: Pilot study for preferred safety activity (Present Study, 2022)

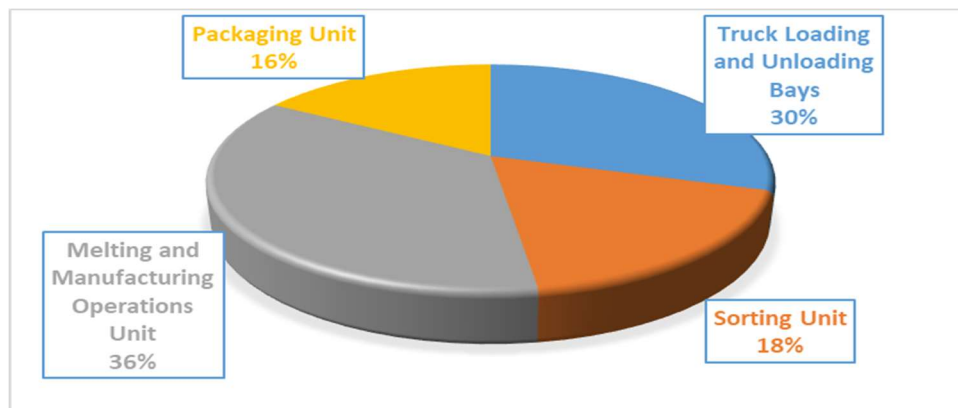


Figure 3: Units of the factory (Present Study, 2022)

Nevertheless, this does not override the fact that some females might also work in the factory but not necessarily in the units considered in this study. The respondents' ages were normally distributed around 26 – 35 and 36 – 45 age brackets, with 56.72 and 31.34 %, respectively. These facts substantiate that the nature of factory work is quite energy-demanding and thus requires individuals with sound energy and physique configurations. Therefore, these could be attributed to the prominence of the age brackets in the selected factory employees. The percentage representation of 46 years and above was less than nine percent (8.96 %). It is suggested that as the individual ages, the energy embedded in such diminishes. That is., there is an inversely proportional relationship between energy buildup and aging.

Also, this depicts that old age could impede the safe and comfortable carrying out of factory activities. Regarding the respondents' educational qualifications, the percentages of secondary, technical, and tertiary schools' qualifications were 64.18, 10.45, and 25.37 %, respectively. However, the percentage of secondary school qualifications (64.18) is at the top in Table 1. The result implies that there are tendencies that several factory employees, understand the need for safety management by way of compliance and active yield to the factory's rules and regulations on conduct. Regarding marital status, 56.72 and 43.28 % of the respondents were single and married, respectively. The percentage of married respondents indicates that the factory job is reliable through which individuals can fend for food for themselves and their families. Generally, the results obtained for the marital status of the respondents imply that the factory job is embraced by both the single and the married, and it is a compelling source of livelihood.

3.2 Evaluation of daily and weekly workload

About five percent (4.48 %) of the sampled respondents reported that they always or often spend/work within the range of 4 – 7 hours per day within the regulated working hour acceptable by OSHA (Table 2). Over 89.55 % of the respondents work 8 – 10 hours per day. While at the extreme, about six percent (5.97 %) work for 10 hours and above daily. With such long hours of daily work, it could not be argued that the employees at some points are exposed to work hazards, which require that safety is put in place. It indicates that the employees are exposed to a high level of risk, which could result in musculoskeletal problems, poor performance, injury, and/or accidents. The risk exposure of the respondents to work-related injury is also influenced by other tasks that require varied postures assumptions.

Table 1: Demographic information of respondents

Variable	Frequency				Total	Percentage	Total (%)
Gender							
	TLUB	SU	MMOU	PU			
Male	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	78.00 (22.00)	100.00
Female	-	-	-	-	-	-	
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
What is your job status?							
Permanent staff	3	2	7	3	15	22.00	100.00
Casual staff	17	10	17	8	52	78.00	100.00
Total	20	12	24	11	67	100.00	100.00
Age of Respondents							
20 - 25	1 (0)	1 (0)	-	-	2 (0)	3.85 (0.00)	2.99
26 - 35	12 (1)	6 (0)	11 (2)	5 (1)	34 (4)	65.38 (26.67)	56.72
36 - 45	4 (1)	3 (1)	6 (2)	3 (1)	16 (5)	30.77 (33.33)	31.34
46 and above	0 (1)	0 (1)	0 (3)	0 (1)	0 (6)	0.00 (40.00)	8.96
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00

Educational qualification							
Secondary	13 (0)	8 (0)	15 (0)	7 (0)	43 (0)	82.69 (0.00)	64.18
Technical	1 (0)	2 (1)	1 (1)	1 (0)	5 (2)	9.62 (13.33)	10.45
Tertiary	3 (3)	0 (1)	1 (6)	0 (3)	4 (13)	7.69 (86.67)	25.37
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
Marital status							
Married	5 (3)	3 (2)	5 (5)	3 (3)	16 (13)	30.77 (86.67)	43.28
Single	12 (0)	7 (0)	12 (2)	5 (0)	36 (2)	69.23 (13.33)	56.72
Divorced	-	-	-	-	-	-	-
Widow(er)	-	-	-	-	-	-	-
Total	17 (3)	10 (2)	17 (7)	8(3)	52 (15)	100.00 (100.00)	100.00
Year of Service							
0 - 1.9	13 (0)	7 (0)	10 (0)	4 (0)	34 (0)	65.38 (0.00)	50.75
2 - 4.9	3 (0)	2 (0)	7 (3)	3 (0)	15 (3)	28.85 (5.00)	26.87
5 - 6.9	1 (1)	1 (0)	0 (3)	1 (1)	3 (5)	5.77 (7.00)	11.94
≥ 7	0 (2)	0 (2)	0 (1)	0 (2)	0 (7)	0.00 (10.00)	10.45
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
How many hours per day do you work?							
< 4	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
4 - 7	0 (0)	0 (0)	0 (2)	0 (1)	0 (3)	0.00 (20.00)	4.48
8 - 10	17 (2)	10(2)	15(4)	8(2)	50(10)	96.15 (66.67)	89.55
>10	0 (1)	0 (0)	2 (1)	0 (0)	2 (2)	3.85 (13.33)	5.97
Total	17 (3)	10(2)	17(7)	8(3)	52(15)	100.00 (100.00)	100.00
How many days per week do you work?							
5	0 (0)	0 (0)	0 (1)	0 (0)	0 (1)	0.00 (6.67)	1.49
6	17 (2)	10(1)	17(5)	8(2)	52(10)	100.00 (66.67)	92.54
7	0 (1)	0 (1)	0 (1)	0 (1)	0 (4)	0.00 (26.66)	5.97
Total	17 (3)	10(2)	17(7)	8(3)	52(15)	100.00 (100.00)	100.00

Note: Truck loading and unloading bays (TLUB); Sorting unit (SU); Melting and Manufacturing Operations Unit (MMOU); and Packaging Unit (PU). [Table computed by (Present Study, 2022)].

Table 2: Influence of training carried out to enhance employees' job commitment.

Response	Frequency (worker)				Total	Percentage (%)	Total (%)
I received safety induction and training from my employer.							
	TLUB	SU	MMOU	PU			
Agree Strongly	0 (1)	0 (0)	0 (3)	0 (1)	0 (5)	0.00 (33.33)	7.46
Agreed	5 (2)	3(2)	10 (4)	2 (2)	20 (10)	38.46 (66.67)	44.78
Disagree	9 (0)	6 (0)	4 (0)	6 (0)	25 (0)	48.08 (0.00)	37.31
Disagree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Neutral	3 (0)	1 (0)	3 (0)	0 (0)	7 (0)	13.46 (0.00)	10.45
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
My factory provides information on all safety and health measures							
Agree Strongly	0 (1)	0 (1)	0 (5)	0 (2)	0 (9)	0.00 (60.00)	13.43
Agreed	1 (1)	5 (1)	8 (2)	2 (1)	16 (5)	30.77 (33.33)	31.34
Disagree	10 (1)	5 (0)	9 (0)	6 (0)	30 (1)	57.69 (6.67)	46.27
Disagree Strongly	6 (0)	0 (0)	0 (0)	0 (0)	6 (0)	11.54 (0.00)	8.96
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
I received training on how to use personal protective equipment							
Agree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Agreed	0 (1)	0 (0)	0 (1)	0 (2)	0 (4)	0.00 (26.67)	5.97
Disagree	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree Strongly	17 (2)	10 (2)	17 (6)	8 (1)	52 (11)	100 (73.33)	94.03
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
I am trained to recognize hazards at work							
Agree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Agreed	0 (0)	0 (0)	0 (2)	0 (1)	0 (3)	0.00 (20.00)	4.48
Disagree	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree Strongly	17 (3)	10 (2)	17 (5)	8 (2)	52 (12)	100 (80.00)	95.52
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
I know the right of employees in relation to Occupation Safety and Health							
Agree Strongly	0 (0)	0 (1)	0 (0)	0 (0)	0 (1)	0.00 (6.67)	1.49
Agreed	0 (1)	0 (0)	0 (3)	0 (2)	0 (6)	0.00 (40.00)	8.96
Disagree	0 (2)	0 (1)	0 (2)	0 (1)	0 (6)	0.00 (40.00)	8.96
Disagree Strongly	17 (0)	10 (0)	17 (2)	8 (0)	52 (2)	100 (13.33)	80.60
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
I received first-aid training							
Agree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Agreed	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree Strongly	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00

Table 2: Influence of training carried out to enhance employees' job commitment (Cont'd)

I received information on new tools before the first use							
Agree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Agreed	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree	0 (3)	0 (1)	0 (3)	0 (2)	0 (14)	0.00 (93.33)	20.90
Disagree Strongly	17 (0)	10(0)	17 (0)	8 (0)	52 (1)	100.00 (6.67)	79.10
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10(2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
I received training on accident investigation							
Agree Strongly	0 (0)	0 (0)	0 (3)	0 (0)	0 (3)	0.00 (20.00)	4.48
Agreed	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree	0 (3)	0 (2)	0 (3)	0 (2)	0 (10)	0.00 (66.67)	14.93
Disagree Strongly	17 (0)	10(0)	17 (1)	8 (1)	52 (2)	100 (13.33)	80.60
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10(2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
I received training on safety awareness creation							
Agree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Agreed	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree	0 (3)	0 (2)	0 (6)	0 (3)	0 (14)	0.00 (93.33)	20.90
Disagree Strongly	17 (0)	10 (0)	17 (1)	8 (0)	52 (1)	100.00 (6.67)	79.10
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
I received training on machine guarding							
Agree Strongly	0 (0)	0 (0)	0 (3)	0 (0)	0 (0)	0.00 (0.00)	0.00
Agreed	0 (0)	0 (1)	0 (1)	0 (1)	0 (0)	0.00 (0.00)	0.00
Disagree	17 (3)	10 (2)	17(7)	8 (3)	52 (15)	100.00 (100.00)	100.00
Disagree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10(2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00

Note: Truck loading and unloading bays (TLUB); Sorting unit (SU); Melting and Manufacturing Operations Unit (MMOU); and Packaging Unit (PU). [Table computed by (Present Study, 2022)].

Other major problems that characterize factory jobs include exposure to whole-body vibrations and an unfit/misaligned workplace. The risk is presumed to be more pronounced for >10 hours per day workers because the work hours are far beyond the one established to be safe by the International Labour Organization, ILO standard of maximum of 8 hours per day. Those who work for six days a week were prevalent with 92.54 %, while just a few work for five days, 1.49 %. 5.97 % of the respondents work more than six days a week, implying that factory work sometimes requires weekend duties. It may be attributed to the demand for products to be met. Also, the profit target of the management, and sometimes the overzealousness or passion of the employees. However, there is a need to articulate the practice of off workdays at weekends to facilitate rest moments for employees and the machinery for enhanced productivity. Aside from that, the employees' health is enhanced, and they have better coordination and effectiveness.

The average percentage year in service cumulatively summed up to 77.62 % for 0 – 1.9 and 2 - 4.9 years. Few of them (10.45 %) had ≥ 7 years in service. Experience of at least 0 – 1.9 years in service is technically sufficient to understand the fundamental operations demanded by a factory job. Notwithstanding, irrespective of the year in service, there is still a continuous need for training and sensitization on safety procedures. However, safety management should be the concern of all. Those with more years in service are perceived to have mastered the act of safety. Such should be inculcated into those with few years in service. It would augment the effort of the factory management in curtailing the adverse effects emanating from inadequate observance of safety procedures to the latter.

3.3 Influence of Employees' Training on Job Commitment

The section presents the results on the influence of training to enhance the employees' job commitment, as shown in Table 2. The researchers inquired about the employees' perspectives on providing safety induction and training (including the new intakes). The percentages of the respondents that agree strongly and agree with this are 7.46 and 44.78 %, respectively. It cumulatively amounts to 52.24 %, which, compared to those that disagreed (37.31 %), was much more, although 10.45 % of them were neutral regarding their responses to the query. The percentage of neutral could be attributed to fear of being disengaged from the workplace, so instead of responding negatively, they thus remained neutral. Another reason for their responses could be that most of them are casual staff, unlike permanent staff, who cannot be disengaged from the job easily.

Regarding safety management, the employees were asked whether the management provides notice on all safety and health measures because this study opined that doing this will ensure compliance and effectiveness. 44.77 % of the respondents agreed strongly and agreed with this, while 55.23 % disagreed. None of them was neutral in response. Compared to those who affirmed the query, those who disagreed were much more. It suggests the need for the management to make further information available to the employees on safety and health measures. On the use of personal protective equipment, just 5.97 % of the respondents agreed that they received training on how to use various personal protective equipment provided by the factory management.

In contrast, those that disagreed were 94.03 %. Generally, factory works and workplace configurations are characterized by various hazards which can result in accidents, especially in the absence of adequate safety management. This study sought information from the respondents on whether they were trained to recognize workplace hazards or not. Nearly all respondents (95.52 %) were not trained in recognizing hazards. Less than 5 percent (4.48 %) agreed, suggesting that most employees require training on hazard recognition. Otherwise, they are predisposed to casualties. Most times, such casualties may result in downtime, loss of capital, loss of body part, and in other cases, death. Contrarily, the respondents that responded negatively could be said to be bold and thus understand the need for hazard recognition. The knowledge of employees' right to occupational safety and health will guide such to make requests if safety and health are not provided as expected.

The respondents were asked whether they knew their right to occupational safety and health. 1.49 and 8.96 % agree strongly and agreed, respectively. 80.60 and 8.96 % of them strongly disagreed and agreed, respectively. The cumulative percentage (89.56 %) of those that disagreed indicates that the management handles the issue of occupational safety management with levity.

However, occupational safety management could serve a wide range of motivation for the employees to discharge their duties in accordance with the goal of the factory. A workplace accident is quite inevitable, no matter how small it will be. In situations like this, positioning a first aid box and necessary kits at a strategic location is reasonably necessary. However, this is not enough, but the adequate use of it is the most important. In this connection, this study sought from the respondents whether they received formal training on administering first-aid details when required in case of causality. The respondents in their entirety (100 %) disagreed that they have been receiving formal training on using first aid details. Therefore, all factory employees studied and allied employees are recommended for training to be up-to-date in how first aid kits are used.

Through this, their job commitments will be second to none. Using any tool or machinery requires technical know-how because of the technicality involved in adequately using such a tool. When the respondents were asked whether their supervisors regularly informed them of the procedure to follow when using a new tool, all (100 %) disagreed. The employees should be brushed up with information regarding using new tools to avert accidents. When asked whether they received training on accident investigation, 14.93 and 80.60 % disagreed, and strongly disagreed. It suggests that the management needs to intensify efforts to train the employees on what investigating an accident is all about and their duties in the event of an accident. This will assist the employees in knowing the possible safety action to take and the appropriate first aid to administer to the victim. A similar trend was observed in safety awareness creation, where all (100 %) of the employees disagreed. 100 % of the employees disagreed that the management trains them on machine guarding. Training and safety should be synergetic because this is quite sacrosanct should accidents be eradicated or averted in the factory.

3.4 Perception of The Employees on Safety Training Undertaken

The perceptions of the employees were evaluated to establish their views on safety-related training (Table 3) because the perception of employees can greatly affect the implementation of the knowledge acquired. When they were interrogated on whether the safety training received helped their behavior on safety and health issues, all the respondents (100 %) agreed strongly. They reported that safety training was a key factor in their behaviors on safety and health issues relating to the discharge of their duties. A similar trend in responses was observed when the respondents were asked whether they believed that effective training would increase their job commitment. All (100 %) of the respondents also affirmed the view that effective training will increase their job commitments.

This result is suggested to be due to the experience that the employees might have had at one point or the other, either in the present factory or elsewhere where they worked before securing the new job. This fact should be a pointer that will incline the management to train the respondents more because it is when the employees are satisfied at work that they will be able to do the job to their best. Otherwise, their job may not be satisfactory to the management. Training will enhance the employees' productivity as well as the profits realization of the factory itself. 68.66 and 23.88 % of the respondents agreed strongly and agreed, respectively, with the belief that safety training should be given priority over PPE or incentive/motivation. 7.46 % disagreed with the opinion. The cumulatively larger percentage (92.54 %) of those who agreed with the opinion could be ascribed that they understand the role that training plays in the discharge of their duties.

This collaborated with the values in Figure 2, which shows that the majority (about 78%) picked training over others for the job's commitment. Also, it could be said that they have passion for their job compared to those (7.46 %) who disagreed. This values

4. CONCLUSIONS AND RECOMMENDATIONS

Conclusively, the study showed that training positively influences factory employees' job commitment if properly done. Having proper training in various areas of involvement of workers can eliminate or control the rate of accidents to a very reasonable minimum. A hazard/accident is caused due to a hazardous condition (which can be any physical, ergonomic, chemical, biological, psychological, or machine hazards), an unsafe act (by the workers), or a combination of the two (the hazardous condition, unsafe act). Training is not limited to any particular area but cuts across every sub-unit, area, and division of the organization or factory. The following types of safety training are hereby recommended for workers in the steel manufacturing factory:

- i. Safety culture training
- ii. Workplace safety training
- iii. Accident Investigation training
- iv. Workstation ergonomics training
- v. Hazard identification training
- vi. Safety housekeeping training
- vii. Machine guards training
- viii. Accident investigation training
- ix. Evacuation procedure training
- x. Safety attitude at work training
- xi. Behaviour-based safety training
- xii. Material safety handling training
- xiii. Work at height safety training
- xiv. Eye safety training
- xv. Use personal protective equipment safety training
- xvi. Tool handling training
- xvii. Machine operation training
- xviii. Safety audit training
- xix. Hazardous material labeling training
- xx. Safety awareness training
- xxi. Hazard communication/control training
- xxii. Evacuation Procedures Training, and so on.

Table 3: Perception of the employees on safety training

Response	Frequency (worker)				Total	Percentage (%)	Total (%)
	TLUB	SU	MMOU	PU			
Safety training received helps my behavior on safety and health issues							
Agree Strongly	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
Agreed	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
Do you believe that effective training will increase your job commitment?							
Agree Strongly	17 (3)	10(2)	17(7)	8(3)	52(15)	100.00 (100.00)	100.00
Agreed	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Disagree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00
I believe that safety training should be given priority over PPE or incentive/motivation.							
Agree Strongly	12 (3)	7 (2)	8 (7)	4 (3)	31 (15)	59.62 (100.00)	68.66
Agreed	5 (0)	3 (0)	6 (0)	2 (0)	16 (0)	30.77 (0.00)	23.88
Disagree	0 (0)	0 (0)	3 (0)	2 (0)	5 (0)	9.61 (0.00)	7.46
Disagree Strongly	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Neutral	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0.00 (0.00)	0.00
Total	17 (3)	10 (2)	17 (7)	8 (3)	52 (15)	100.00 (100.00)	100.00

Note: Truck loading and unloading bays (TLUB); Sorting unit (SU); Melting and Manufacturing Operations Unit (MMOU); and Packaging Unit (PU). [Table computed by (Present Study, 2022)].

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