

INFLUENCE OF LENGTH OF SERVICE ON WORKERS' ATTITUDE TOWARDS OCCUPATIONAL HAZARDS

BY

UGWU, DOROTHY IFEYINWA, PH.D¹

Abstract

The study examined the attitude of workers towards occupational hazards and the attitude of long and short serving workers towards occupational hazards in Anambra Motor Manufacturing Company (ANAMCO), Enugu, Nigeria. One null hypothesis was tested at 0.05 level of significant. The population for the study consisted of 521 workers of ANAMCO. The instrument used for the study was Attitude of Workers Regarding Occupational Hazards Questionnaire (AWROHQ). This was designed by the researcher. Stratified sampling and simplerandom sampling techniques were used to draw sample for the study. Mean, standard deviation and student t-test were used for data analysis. Results revealed that workers in ANAMCO Company had favourable attitude towards their workplace hazards; long serving workers showed more favourable attitude than the short serving workers. However, the result revealed no significant difference in the attitude of the long and short serving workers towards their hazardous work environment. In view of this, it was recommended, among others, that management should show strong and true commitment to occupational health and safety so that all workers, irrespective of length of service, will improve their attitude regarding safety in their work environment.

Key words: Attitude, Workers, Occupational hazards, Length of service

¹ Department of Health and Physical Education, University of Nigeria, Nsukka

Introduction

Workplace injuries, accidents and illness have continued to be significant problems in our various work organizations and this has attracted the attention of scholars in the area of work and family structures. The importance of safety of workers in their work environment notwithstanding, the attention and interest of researchers in this area vary across countries. Bureau of Labour Statistics (2010) noted that there were approximately high rate of injuries and fatalities at work, creating a genuine interest to protect the workers against the hazards of their jobs in the developed countries. In Nigeria, the situation seems to be worse. For instance Owumi (1997) had reported that many workers in Nigeria are not knowledgeable about the harmful effects of their exposures to the substances of production. This reported low level of workers' knowledge about occupational hazards, Owumi posits, may affect the attitude of workers towards their workplace environment. This also poses a potential health problem to the workers, for according to Okwulehie

(1997), the concept of occupational health hazards derives from the realization that workers are of special risks of injury and health impairment, arising from exposure to hazards in the work environment. In view of the realization of the need for an ambient and conducive work environment, where workers would realize their potentials and maintain high productivity, Ford and Tetrick (2011) had suggested that workplace environment should be free of occupational hazards.

Occupational hazards refer to all aspects of work conditions, which are injurious to the health workers (McCormic & Ilegen, 2008). The present study adopted this definition as given by McCormic and Ilegen since the study was interested in exploring the attitude of workers regarding all aspects of work conditions that could constitute hazards to the health and well-being of workers. World Health Organization-WHO (2007) classified occupational hazards in terms of mechanical hazard; ergonomically poor working conditions; biological agents, physical factors; social hazards;

reproductive hazards and allergenic agents, chemical agents and psychological stress.

Numerous studies have reported the prevalence of various forms of occupational hazards in Nigerian industries. For instance, Omolulu (1997) had identified many hazards in Nigerian workplaces to include excessive heat, excessive cold, harmful dusts and spores, toxic chemical exposures and light radiation. Adaye, Bedibele, Onakpoya and Omotoye (2011) found humidity, repetitive tasks, explosion hazards and physical workload as hazards encountered by Nigerian workers. Uhumangho, Njinaka, Edema, Dawodu and Omoti (2010) noted that in developing countries like Nigeria, workers may intuitively have a positive attitude concerning their hazardous workplace environment and may not adopt the necessary actions in order to avert the hazards.

To have an attitude towards occupational hazards means a tendency to have a work role orientation characterized by approval or

disapproval concerning hazardous workplace environment (Ford & Tetrick, 2011). Attitudes are learned in the course of socialization and education and once attitude is acquired, it helps individuals to organize, simplify and understand the world around them (Lambert and Lambert, 2013). This understanding according to Lamberts will help individuals express their fundamental values, conform to the environment and maximize rewards from the environment. Attitude is classified into three forms namely cognitive, affective and behavioral (Vander-Landen & Zanden, 2009). Cognitive attitude according to Vander-Landen and Zanden refers to individual's thoughts, beliefs and ideas about something. Affective attitude means the feelings or emotions that the actual (attitude) object, events, situation or its symbolic representation evokes within an individual (Klein, 2000). The behavior attitude is the tendency or disposition to act in certain ways with reference to some object, event, or situation. This study investigated the affective form of attitude since the study was

interested in workers' feelings and emotions about the hazards in the work environment.

Some theories have also tried to provide useful framework for understanding the relevance of workers attitude towards occupational hazards. Among these theories is Festinger's (1996) theory of Cognitive Dissonance (CD). The theory posits that attitude predicts behavior and that where attitude and behavior are not related, cognitive dissonance results. Cognitive dissonance refers to an individual's motivation to reduce the discomfort (dissonance) caused by two inconsistent thoughts. This theory is important to this study because attitude helps workers in maintaining consistency of thoughts, feelings and decisions within the work environment with some degree of favour or disfavour.

When a worker has favourable attitude, it means that the worker is comfortable, feeling free and unconcerned about the hazards in his workplace. The reverse becomes the case for a worker that shows

unfavourable attitude. In other words, a worker who has favourable attitude towards workplace hazard has positive feelings towards the hazards and vice versa.

Evidence from literature had proved that workers attitude act as a strong predictor of several work performance factors such as creativity, extra role performance (Dakley, 2010), managerial effectiveness and workers safety compliance (Ford & Tetric, 2011). This study assessed the attitude of the long and short serving workers regarding their workplace hazards. The long serving workers are those who have worked in the company for the period of five years and above while short serving workers are those who have worked in the company for less than five years.

Findings have shown that length of service plays a significant role in improving the attitude of workers towards their workplace hazards (Williquist & Torner, 2005). This, according to Williquist and Torneris because as workers gain more experience in their job, they are likely

to develop more consistent feelings and emotions towards their workplace hazards, with some degrees of favour or disfavour. Metal and Ghahramani (2009) studied the attitude of workers and injury profiles in a large communication company in Canada. The result indicated that the short serving workers showed more favourable attitude towards their workplace hazards than the long serving workers. In the same vein, Donald (2011) investigated the effects of personal variables on workers attitude and accident prevention in British paper producing company. The finding revealed that the short serving workers showed more favourable attitude towards hazards in their workplace, and sustained more injuries than the long serving workers. On the contrary, Labog (2008) and Hansan (2012) different studies had shown that both the long and short serving workers demonstrated unfavorable attitude towards occupational hazards.

From the reviewed studies, it is clear that the findings of various researchers on attitudes of workers towards occupational hazards are inconsistent.

Besides, most of these studies were conducted using workers from the Western countries who share different cultural circumstances with Nigeria. The present study examined the attitude of workers using Nigeria sample. Such Nigerian based study is needed to verify the validity of some of the findings gathered across cultures.

Purpose of the Study

The purpose of this study was to assess workers' attitude regarding occupational hazards based on length of service. Specifically, the study:

1. assessed the attitude of workers towards occupational hazard.
2. assessed the attitude of the long and short serving workers towards occupational hazard.

Research Questions

1. What is the attitude of workers towards occupational hazards?
2. What is the attitude of long and short serving workers towards occupational hazards?

Hypothesis

There is no significant difference between the mean ratings of long and short serving workers regarding their attitude towards occupational hazards ($p < .05$)

Methods

Research Design:

The research design adopted for the study was the descriptive survey design.

Area of the Study:

The study was carried out in Anambra Motor Manufacturing Company (ANAMCO), which situates in Enugu state, Nigeria. ANAMCO assembles and fabricates car spare parts and uses some chemicals that are hazardous to health of workers. Hazards associated with the nature of their job include: physical hazards, mechanical hazards, ergonomically poor working conditions, psychological stress, social conditions, reproductive hazards and allergenic agents. The worker's exposure to these hazards formed the bases for the choice of the company for the study.

Population for the study:

The population for the study consisted of all the 521 workers of Anambra Motor Manufacturing Company (ANAMCO), Enugu. Out of this number, 215 of them have worked for less than 5 years while 306 of them have worked for 5 years and above.

Sample and Sampling Techniques:

The sample for the study was 261 workers selected by means of stratified sampling technique. Available data on the number of workers per section allowed stratification of sampling proportionately by sections. In other words, workers were selected from the eight sections that make up the company in proportion of 1:2 of the number of workers in each section. The sections are: administrative with 46 workers, mechanical 152, assemblage 142, health unit 62, security 43, bursary 38, catering 18 and laundry 20 workers.

Instrument for Data Collection:

The instrument used for the study was a questionnaire developed by the researcher namely the Attitude of

Workers Regarding Occupational Hazard Questionnaire

(AWROHQ). The questionnaire was designed to assess the attitude of workers regarding occupational hazards. It consisted of two sections. Section A gathered information on the demographic variable of length of service. Section B comprised 10 items that measured workers attitude regarding occupational hazards. The respondents were requested to indicate their degree of agreement with the attitudinal statements. This had a likert-type format ranging from strongly Agree (SA) = 5; Agree (A) = 4; Undecided (U) = 3; Disagree (D) = 2 and Strongly Disagree (SD) = 1.

Draft copies of the questionnaire were sent to three lecturers in University of Nigeria, Nsukka who critically examined the instrument in terms of appropriateness and sustainability to the purpose of the study. The face validity of the instrument was determined through the judgment of these three experts. In order to establish the reliability of the instrument, 96 copies of the instrument were administered to

workers of Emenike Nigeria Ltd, Enugu. The data were analyzed using Pearson's product moment correlation coefficient, which determined the split-half reliability of the instrument. The split-half reliability of .85 was obtained. This was corrected with Sperrman-Brown formula, $r = .92$, to estimate the validity of the instrument.

Method of Data Collection:

In order to facilitate the distribution of the questionnaire, the researcher raised an introductory letter to the General Manager Personnel Unit of the organization. A total number of 261 copies of the questionnaire were distributed to the workers and this was done through the eight sectional heads of the company. The time allotted for the filling of the questionnaire was thirty minutes and this was to enable the workers use their break period in responding to the questionnaire. The questionnaire were filed and collected on the spot. A total number of 221 copies of the questionnaire were correctly filled and this yielded a return rate of 86.73 percent.

Method of Data Analysis: Mean, standard deviation and student t-test were used to analyze data on attitude of workers regarding occupational hazards. The research questions were answered using mean and standard deviation, using criterion mean of 3.00. The criterion mean was determined thus $5 + 4 + 3 + 2 + 1 = 15/5 = 3.00$. Following from this all the mean scores that were within the limits of 3.00 and above indicated favourable attitude while mean scores that were below 3.00 showed unfavourable attitude regarding occupational hazards. The hypothesis was tested using student t-test.

Results

Research Question one:

What is the attitude of workers regarding occupational hazards?

Table 1

Attitude of Workers Regarding Occupational Hazards (N= 221)

S/No	Attitude questions	Mean (x)	Standard deviation (SD)	Hazards Decision
1.	I hate working on vibration machine because of the adverse effect it has on workers	3.02	.89	Favourable
2.	I like working in this company because the work environment is not stressful to me	2.99	0.92	Unfavourable
3.	Chemical hazards make me feel uncomfortable each time I remember going to work	2.97	0.98	Unfavourable
4.	I feel that the management is doing their best to improve on social relationship among workers in this company	3.12	0.88	Favourable
5.	I do not like working in this industry because of the biological hazards prevalent in it	3.26	0.96	Favourable
6.	I enjoy the equipment I work with in this company because they are well maintained and up-to-date	2.65	0.98	Unfavourable

7.	I do not like working in this company because the work environment is too hot for my comfort.	3.23	1.01	Favourable
8.	I feel safe wearing the protective devices in my workplace.	3.52	0.83	Favourable
9.	Some of the materials used for production in this company make me sick.	3.54	0.87	Favourable
10.	I do not feel that any material used for production in this company can render a person impotent	2.94	0.99	Unfavourable
Overall mean		3.12	0.93	Favourable

Data in Table 1 showed an overall mean of ($\bar{x} = 3.12$) which was within the limit of 3.00 and above indicating that ANAMCO workers had favourable attitude. The Table specifically indicated that "I hate working on vibration machine" (= 3.02); "I feel that the management is doing their best to improve on workers' social relationship" (= 3.12); "I do not like working in this industry because of biological hazard present in it" (= 2.65); "I do not like working in this company because the work environment is too hot for my comfort" (= 3.23); "I feel safe wearing the protective devices in my workplace" (= 3.52); and "some of the materials used for production in this company make me sick" (= 3.54) had mean scores that fall within the limit of 3.00 and above revealing that the workers had favourable attitude regarding occupational hazards. Furthermore, "I like working in this company because the work environment is not stressful to me" (= 2.99); "chemical hazards make me feel uncomfortable each time I remember going to work" (= 2.97); "I enjoy the equipment I work with" (= 2.65); and "I do not feel that any material used for production in this company can render a person impotent" (= 2.94) had mean scores within the limit of below 3.00 indicating that the workers had unfavourable attitude regarding occupational hazards.

Research Question Two: what is the attitude of long and short serving workers regarding occupational hazard?

Table 2

Attitude of Long and Short Serving Workers Regarding Occupational Hazards

S/No	Attitude Questions	Long serving workers (n ₁ =143)		Short serving workers (n =78)	
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂
1.	I hate working on vibration machine because of the adverse effect it has on workers	3.70	.695	3.35	1.025
2.	I like working in this company because the work environment is not stressful to me	3.23	1.050	3.24	.969
3.	Chemical hazards make me feel uncomfortable each time I remember going to work	3.04	.898	2.87	1.048
4.	I feel that the management is doing their best to improve on social relationship among workers in this company	2.90	.912	3.11	.908
5.	I do not like working in this industry because of the biological hazards prevalent in it	3.42	.882	3.05	1.013
6.	I enjoy the equipment I work with in this company because they are well maintained and up-to-date	3.13	.817	3.10	.961
7.	I do not like working in this company because the work environment is too hot for my comfort.	3.67	.637	3.31	.991
8.	I feel safe wearing the protective devices in my workplace.	2.91	.991	2.97	.995
9.	Some of the materials used for production in this company make me sick.	2.61	.866	2.55	.983
10.	I do not feel that any material used for production in this company can render a person impotent	3.05	.850	2.98	.941
Overall mean		3.16	1.759	3.05	.983

Data in Table 2 showed an overall mean score of 3.16 for the long serving workers and overall mean of 3.05 for the short serving workers. These overall mean scores indicated that both the long and short serving ANAMCO workers had

favourable attitude regarding occupational hazard. However, the overall mean score of the long serving workers showed that the long serving workers had more favourable attitude than the short serving workers.

Hypothesis One

There is no significant difference in the attitude of long and short serving workers regarding occupational hazards ($p < .05$).

Table 3

Summary of t-test of Workers' Attitude Regarding Occupational Hazard

S/No	Attitude question	Long serving workers (n= 143)		Short serving (n = 78)		t-cal	Df	P.value	Decision
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂				
1.	I hate working on vibration machine because of the adverse effect it has on workers	3.70	.695	3.35	1.025	-4.420	.475	.000	S
2.	I like working in this company because the work environment is not stressful to me	3.23	1.050	3.24	.969	.103	.475	.918	NS
3.	Chemical hazards make me feel uncomfortable each time I remember going to work	3.04	.898	2.87	1.048	-1.904	.475	0.58	NS
4.	I feel that the management is doing their best to improve on social relationship among workers in this company	2.90	.912	3.11	.908	2.554	.475	.011	S
5.	I do not like working in this industry because of the biological hazards prevalent in it	3.42	.882	3.05	1.013	-4.183	.475	.000	S
6.	I enjoy the equipment I work with in this company because they are well maintained and up-to-date	3.13	.817	3.10	.961	-.336	.475	.737	NS
7.	I do not like working in this company because the work environment is too hot for my comfort.	3.67	.637	3.31	.991	-4.800	.475	.000	S

8.	I feel safe wearing the protective devices in my workplace.	2.91	.991	2.97	.995	.577	.475	.564	NS
9.	Some of the materials used for production in this company make me sick.	2.61	.866	2.55	.983	-.786	.475	.432	NS
10.	I do not feel that any material used for production in this company can render a person impotent	3.05	.850	2.98	.941	-.882	.475	.378	NS
	Overall mean	3.16	1.759	3.05	.983	-.202	.475	.382	NS

Table 3 showed that generally, the long serving workers did not differ significantly from the short serving workers in their attitudes regarding occupational hazards. Therefore, the null hypothesis was accepted as stated. Specifically, while the workers responses did not show any significant difference across most of the questionnaire items, they were significant on four. There were significant difference ($t=475, -4.420, P<.05$) on “I hate working on vibration machine”; ($t=475, 2.554, 9<.05$) on “I feel that the management is doing their best to improve on social relationship among workers”; ($t=475, -4.183, P<.05$) on “I do not like working in the industry because of biological hazard prevalent in it” and ($t=475, -4.800, P<.05$) on “I do not like working in this company because the work environment is too hot for my comfort.

Discussion

The result in Table 1 showed that in overall, workers of ANAMCO Company demonstrated favourable attitude towards the hazards in their workplace environment. This result is consistent with the finding of Owumi (1997), which pointed to the fact that Nigerian workers are not knowledgeable of the harmful effects of their exposures to the substances used for production. It then implies that their lack of knowledge may have affected their attitude (feelings, thoughts and emotions) regarding their hazardous workplace environment. The result also supported Uhumangho, Njinaka, Edema, Dawodu and Omoti (2010) who states that Nigerian workers may intuitively have a favourable attitude concerning their

hazardous workplace environment and may not take proper measures in averting the hazards. The theory of Cognitive Dissonance (CD) by Festinger (1996), on which this work is anchored, is equally in support of this finding. The theory suggests that attitude helps workers in maintaining consistency of thoughts, feelings and decisions within the workplace environment with some degree of favour or disfavour. It is therefore not surprising that the workers of ANAMCO Company had shown favourable attitude towards their workplace hazards. This favourable attitude of workers could be explained on the bases that the workers were not properly informed about the hazards associated with the substances, and equipment they use in production. Such lack of information may have led to their having favourable attitudes towards their work place hazards.

The result in Table 2 revealed that the long serving workers had more favourable attitude than the short serving workers towards their workplace hazards. However, the result of the t-test in Table 3 indicated no

significant difference in the attitude of the long and short serving workers of ANAMCO Company regarding occupational hazard. The findings supported Labog (2008) and Hansan (2012) who observed respectively that both the long and short serving workers showed the same attitude towards their workplace hazards. Conversely, the result disagreed with Williquet and Torner (2005), Metal and Ghahramani (2009) and Donald (2011) who found respectively that there were significant differences in the attitude of long and short serving workers regarding occupational hazards. The reason for this finding could be that the short serving workers may have been careful in handling their jobs since they have not gained mastery of their job. This could have influenced their attitude, hence their having the same attitude with the long serving workers.

Conclusion

The study assessed the attitude of workers; attitude of long and short serving workers of ANAMCO regarding occupational hazards. The finding showed that workers had favourable attitude regarding

occupational hazards. The result also indicated that the long serving workers had more favourable attitude than the short serving workers regarding occupational hazards. However, the finding showed no significant difference in the attitude of the long and short serving workers towards occupational hazards. It then implies that workers of ANAMCO Company require proper information regarding the hazards associated with their work environment.

Recommendations

The following recommendations are made:

1. That workers should be subjected to appropriate training, retraining, seminars, and workshops to help them become well informed about the hazards of their workplace environment. This will improve the attitude of the workers towards their workplace hazards and minimize accident and other negative health conditions that could arise in their course of performing their work roles.
2. That management should show strong and true commitment to occupational health and safety so that all workers, irrespective of length of service, will improve their attitude towards safety in their jobs.
3. That new workers should be given proper orientation regarding the prevalence of hazards; their susceptibility and the consequences of their exposure to hazards in their work place environment.

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