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Sources and effects of work-related stress among employees in foreign-owned manufacturing companies in Ogun state, Nigeria

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ABSTRACT

This study investigates the sources and effects of work-related stress among employees in foreign-owned manufacturing companies in Ogun State, Nigeria. The study used cross sectional descriptive design and a total of three hundred and two (302) respondents were selected using stratified random sampling technique from five randomly selected foreign-owned manufacturing companies. Data were collected using questionnaire and statistically analysed using frequencies, percentages and weighted means. The study reveals factors such as unfavourable physical working conditions, job insecurity, poor career development, and long working hours fostering stress on employees in the sampled companies. The study further reveals that respondents suffered consequences such as restlessness, anxiety and nervous indigestion, headache, neck ache, and inability to concentrate. This study however has implication for management of foreign-owned manufacturing organization. Based on this, appropriate recommendations were made application of which will help to ensure enabling workplace environment and thus reduce the effects of stress on employees.

KEY WORDS

work-related stress, employees, foreign-owned manufacturing companies, Ogun state, Nigeria

JEL Code: I30, J81, M10

1 INTRODUCTION

In the global workplace, manufacturing companies have witnessed tremendous organizational transformation characterized by continuous modification of pace and complexity of work in which hardly any country is spared. These are in response to globalization of economy and market, technological advancement, and changing consumer preferences (World Health Organization, WHO, 2007; Manzoor, Awan, and Mariam, 2012; International Labour Organization, ILO, 2012). These have combined to make industrial work not only mentally and emotionally demanding but stressful.

Work-related stress can therefore be defined as an unpleasant emotional situation which an individual experiences when the requirements of job are not counter-balanced with his/her ability to cope with the situation (Naqvi, Khan, Kant and Khun, 2013). Work-related stress has been associated with varying health problems such as circulatory and gastro intestinal diseases as well as physical psychosomatic and psycho-social problems (Heider and Supriya, 2007; WHO, 2007; Naqivi, Khan, Kant, and Khan, 2013). The declining physical and mental health of workers invariably leads to deterioration in the performance of the entire organization (WHO, 2007; ILO, 2012). The negative impact of work-related stress is also likely to spill over into the home domain and limit opportunities for relaxation and recovery, leading to impaired health and job performance (Allen, Herst, Bruck, and Sutton, 2000 cited in Kinman and Wray, 2013).

Statistically, between 2014 and 2015, the total number of cases of work related stress in the United Kingdom was 440,000 (a prevalence rate of 1380 per 100,000 workers) with a total of 9.9 million working days lost (Health and Safety Executive, HSE 2015). In the United States of America, the cost of workplace stress on employers is estimated at over \$300 billion annually; evidenced in high absenteeism, lower productivity, staff turnover, workers' compensation, medical insurance and other stress-related expenses (European Agency for Safety and Health at Work, 2014), and \$232 billion in Japan (International Council of Nurses, 2015).

The above suggest that work stress is a major threat to the attainment of sustainable growth in the industrial sector in particular and economic development of any nation in general. Although, studies (University of Cambridge,

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2014; Health and Safety Executive, 2015; Oyungerel, Wang, Ehsan, and Bayanda, 2015) have been conducted on the sources and effects of work stress on employees, however, the urgency of attaining substantial growth and national development call for more studies in developing countries, including Nigeria. This study is thus conceived to make contribution on this important subject.

2 STATEMENT OF THE RESEARCH PROBLEM

Studies (University of Cambridge, 2014; Health and Safety Executive, 2015; Oyungerel, 2015) have been conducted in Europe to examine the sources and effects of work-related stress in organisation. Findings from these studies reveal work load pressures, including tight deadlines and too much responsibility, and a lack of managerial support, financial and family issues, as the major causes of work-related stress. While the effects of work related stress on employees as revealed by the studies include physical (sleep disorder, dizziness, headaches, and high blood pressure); emotional (anxiety, irritability, and depression); intellectual (loss of concentration, lack of motivation, difficulty with thought process, loss of memory, and poor decision making); behavioural (substance abuse, including alcohol misuse, isolation and unpunctuality). However, these findings may not be adequate to explain in totality the situation in Nigeria given the differences in socio-cultural environment of countries.

In Nigeria, studies (Ekundayo and Kolawole, 2013; Ihuoma, 2013; Ogini, Afolabi, and Erigbe, 2013; Adetayo, Ajani and Olabisi 2014; Essien, 2014) have also been conducted on sources and effects of work-related stress in organisation. Outcome of the studies reveals factors such as work overload, work/family conflict, pressure from management/boss, poor work environment, challenge in coping with new technology, late payment of salary; as the major causes of work-related stress. While the effects of work stress on employees, according to the studies, include tiredness, worry, unhappiness, weakness, headache, anger/frustration, depression, and job dissatisfaction.

Notwithstanding the efforts from previous studies in Nigeria, none of the studies examined the sources and effects of work-related stress in foreign-owned organization in the country. A plausible implication of this neglect is that it makes it difficult to know how work-related stress affects employees in such organisation and what factors in their working environment cause the greatest burden. This current study thus seeks to investigate into this phenomenon.

Research Questions

This research is guided by the following questions:

- (i) What are the sources of work-related stress in foreign-owned manufacturing companies in Ogun State?
- (ii) What are the consequences of work-related stress among employees in foreign-owned manufacturing companies in Ogun State?

Objectives of the Study

Based on the stated problem and research questions, the general objective of this study is to examine the sources and effects of work-related stress among employees in foreign-owned manufacturing companies in Ogun State. To achieve this, the study specifically seeks:

- (i) To investigate the sources of work-related stress in foreign-owned manufacturing companies in Ogun State
- (ii) To find out the consequences of work-related stress among employees in foreign-owned manufacturing companies in Ogun State

Methodology:

(i). Brief Description of the Study Area

This study was carried out in Ogun State between November and December, 2015. The state was originally part of the Western Region in the three-region structure of Nigeria in 1954. With the creation of twelve federal states by General Yakubu Gowon's military government in 1967, it became part of the Western State. In 1976, Ogun state was carved out of Western State by the military administration of General Murtala Muhammed. The state is located between latitude 60N and 80N and longitude 2½ E and 50E and bordered by Oyo and Osun States to the North, Lagos State to the South, Ondo State to the East and the Republic of Benin to the West (Ogun State Bureau of Land and Survey, 2011). Ogun state is selected for this study because it is one of the states with the highest numbers of foreign-owned manufacturing companies in Nigeria.

(ii). Research design, Study population, Sample size and Sampling technique

This study used cross sectional descriptive design. This design is considered apt since the aim of the study is to describe the sources and effects of work-related stress among employees across foreign-owned manufacturing companies in Ogun State.

The study population includes all employees of foreign-owned manufacturing companies in Ogun State; and the study utilizes multi-stage sampling technique. The first stage involves the purposive selection of all the five (5) categories of foreign-owned manufacturing companies present in the state. These are: food, beverage and technology; chemical and pharmaceuticals; domestic and industrial plastic, rubber and form; basic metal, iron and steel and fabrication metal products; and pulp, paper and paper products, printing and publishing categories. All the categories were chosen in order to provide wider spread or coverage for the study.

The second stage involves selection of one (1) company each from each of the five (5) categories of foreign owned manufacturing companies. This was done using simple random sampling technique via balloting. The selected companies are De-united Foods Industries Limited, Ota, Ogun State (representing food, beverages and technology category); Watson Global Pharmaceutical Industries Limited, Ijebu Ode, Ogun State (representing chemical and pharmaceuticals category); Shongai Packaging Industries Limited, Sango-Ota, Ogun State (representing domestic and industrial plastic, rubber and form category); Midland Galvanizing Products Limited, Abeokuta, Ogun State (representing basic metal, iron and steel and fabrication metal products category); and Alucan Packaging Limited, Agbara, Ogun State (representing pulp, paper and paper products, printing and publishing category).

The third stage in the sampling process involves selection of sample of respondents. Each of the companies selected has the following staff population (as at the time of carrying out this study): De-united Foods Industries Limited, Ota = 501; Watson Global Pharmaceutical Industries Limited, Ijebu Ode = 200; Shongai Packaging Industries Limited, Sango-Ota, =183; Midland Galvanizing Products Limited, Abeokuta, =150; and Alucan Packaging Limited, Agbara = 192. The total population of workers in the five selected companies is one thousand two hundred and twenty six (1226). From this, using Yamane (1967) sample size determination formular of $n = N/1+N(e^2)$ where n = required sample size, N = total population, e^2 = sampling error (0.05), and 1 = constant, a total of three hundred and two (302) respondents were chosen from the total population of workers in the five selected companies. Sample size in each of the five selected companies was thereafter, determined proportionally. In specific, 124 respondents were selected in De-united Foods Industries Limited; 49 in Watson Global Pharmaceutical Industries; 45 in Shongai Packaging Industries Limited; 37 in Midland Galvanizing Products Limited; and 47 in Alucan Packaging Limited. In selecting the respondents for the study at the companies level, stratified random sampling techniques was used; that is, each of the companies was first of all stratified into department and within each department the workers were stratified into two (2) non-overlapping cadres of junior and senior staff, thereafter simple random sampling technique (through the means of random numbers) was used to select respondents from each cadre. The choice to use random technique is hinged on the fact that it allows the respondents an equal opportunity to be selected.

(iii). Research instrument

Data were collected by means of structured questionnaire. The questionnaire was divided into three (3) sections. Section A consists of questions on demographic characteristics of the respondents. It aims to get information from the respondents regarding their gender, age, marital status, educational level, years of working experience, and income. Section B concentrates on work-related stressors in work place namely work stressors, work-home interface, and personal stressors. Work stressors include high work pace, unclear work tasks, lack of control over work pace/method, etc. There are 22 items in this section and all were adapted from the WHO (2007) Stress Survey Questionnaire and used with modifications made to suit the current study. Work-home interface is also categorized into five and these include conflict of responsibilities and role, home as the work place, family exposed to work related hazard, etc. This part consists of 7 items, of these items, 4 were adapted from Kinman and Wray (2013) Stress Survey Questionnaire while the remaining 3 were adapted from the WHO (2007) Stress Survey Questionnaire. Personal stressors were categorized into 6 namely over committed to work, lack of self confidence, family crisis, financial problem, sleep deprivation, health challenge/crisis. There are six items under these stressors. Of these items, 3 were adapted from the WHO (2007) Stress Survey Questionnaire and the remaining three were provided by the researcher. The main purpose of section B is to know how often the condition described in literature is a source of stress for the foreign-owned manufacturing companies' employees. Participants were asked to rate items under each stressor using a five point rating scale (where 1 means "never a source of stress"; 2 means "rarely a source of stress"; 3 means "sometimes a source of stress"; 4 means "often a source of stress"; and 5 means "always a source of stress").

Section C elicits information on effects of work related stress among employees. There are ten items in this section and all were adapted from the Canadian Mental Health Association Stress in the Workplace (2005) Questionnaire and used with modifications to suit the current study. Participants were asked to rate items in this section using a three point rating scale (where 1 means "never"; 2 means "sometimes"; and 3 means "always". All in all, all the instruments adapted in this study had cronbach alpha reliability coefficient of between 0.62 to 0.73

(iv). Pilot Study

Pilot study was conducted to test for the reliability of the questionnaire on thirty employees in foreign-owned manufacturing companies (different from the sampled companies) in Ogun State. The resulting data yielded a cronbach alpha reliability coefficient of 0.82.

(v). Procedure of Data Collection

Copies of questionnaire were personally handed to respondents at their offices and the contents explained to some respondents who requested to be guided. The reason for guiding such respondents was to help them understand the relevance of the research and provide their independent views on the questionnaire items given them. After three days the researcher went back and collected the answered questionnaires because the respondents may forget to fill in the questionnaire or misplace them entirely. All in all, the response rate was 99.67% of the total questionnaire administered.

(vi). Data Analysis

The data collected were processed using Statistical Package for Social Sciences (SPSS) version 20, and statistically analysed using frequencies and percentages, to describe respondents' socio-demographic characteristics, and sources and effects of work stress. In addition, weighted mean was used to rank sources and effects of work-related stress according to their degree of burden on respondents.

3 RESULTS AND DISCUSSION

Socio-demographic Characteristics of the Respondents

Table 1 below show the socio-demographic characteristics of the respondents used in this study

Table 1: Respondents' socio-demographic characteristics

Variables	Characteristics	Frequency	Percentage
Gender	Male	198	65.8
	Female	103	34.2
	Total	301	100.0
Age	Less than 20	06	2.0
	20-29	29	9.6
	30-39	51	16.9
	40-49	178	59.1
	50 and over	37	12.3
	Total	301	100.0
Marital status	Married	179	59.5
	Never married	43	14.2
	Divorced	27	9.0
	Separated	31	10.3
	Widowed	21	7.0
	Total	301	100.0
Years of working experience	Less than 5years	42	14.0
	5-10years	48	15.9
	11-15years	157	52.2
	16-20years	31	10.3
	>20 years	23	7.6
	Total	301	100.0
Educational level	No formal education	00	0.00
	Primary school cert.	05	1.7
	Secondary sch. Cert.	107	35.5
	Tertiary education cert.	178	59.1
	Others	11	3.7
	Total	301	100.0
Monthly income (in Naira)	<20,000	07	2.3
	21,000-40,000	42	14.0
	41,000-60,000	57	18.9
	61,000-80,000	63	20.9
	81,000-100,000	81	26.9
	>100,000	51	16.9
	Total	301	100.0

Source: Field Survey, 2015

Table 1 shows the socio-demographic characteristic of the respondents. From the table, majority of the respondents were male (65.8 percent), aged between 40-49 years (59.1 percent), married (59.5 percent), had between 11-15 years of working experience (52.2 percent), literate and have tertiary education certificate (59.1 percent), and earned income of between N81, 000- N100, 000 Naira monthly (26.9 percent).

Table 2: Awareness of work stress

Name of Companies	Awareness of Work Stress		Total
	Yes	No	
Midland Galvanising Products Ltd	29 (78.40%)	8 (21.60%)	37 (100.00%)
Watson Global pharmaceutical Ind.	44 (89.80%)	5 (10.20%)	49 (100.00%)
Shongai Packaging Ind Ltd	36 (80.00%)	9 (20.00%)	45 (100.00%)
Alucan Packaging Ltd	33 (70.20%)	14 (29.80%)	47 (100.00%)
De-United Foods Industries Ltd	106 (86.20%)	17 (13.80%)	123 (100.00%)
Total	248 (82.40%)	53 (17.60%)	301 (100.00%)

Source: Field Survey, 2015

From the table 2 above, about 82.40 percent of the respondents were aware of work stress before started working with the sampled companies while only 17.60 percent of the respondents have not heard about work stress before. This finding indicates that majority of the respondents in the sampled companies had knowledge of work-related stress before been employed in their present workplace.

Table 3: Sources of information about work stress

Name Of Companies	Sources of Information					Total
	Radio	Television	Newspapers	Friends/ Relatives	Health Workers	
Midland Galvanising Products Ltd	0 (0.00%)	6 (21.40%)	11 (39.30%)	5 (17.90%)	6 (21.40%)	28(100.00%)
Watson Global pharmaceutical Ind.	6 (13.60%)	11 (25.00%)	10 (22.70%)	15 (34.10%)	2 (4.50%)	44(100.00%)
Shongai Packaging Ind Ltd	11(30.60%)	7 (19.40%)	9 (25.00%)	5 (13.90%)	4 (11.10%)	36(100.00%)
Alucan Packaging Ltd	0 (0.00%)	18 (54.50%)	13 (39.40%)	0 (0.00%)	2 (6.10%)	33(100.00%)
De-United Foods Industries Ltd	20(18.70%)	38 (35.50%)	28 (26.20%)	20 (18.70%)	1 (0.90%)	107(100.00%)
Total	37(14.90%)	80 (32.30%)	71 (28.60%)	45 (18.10%)	15 (6.00%)	248(100.00%)

Source: Field Survey, 2015

From table 3 above, about 32.30 percent of the respondents heard about work-related stress through television programme, while 28.60 percent read about it from newspapers. Other sources included friends/relatives (18.10 percent) and radio programmes (14.90 percent) while the remaining (6.00 percent) respondents heard about it from health workers. Overall, this result indicate that television programme is the most common source of information about work related stress.

Table 4: Work-related stressors in the sampled companies

No. in the Questionnaire	Items	Never a source of stress 1	Rarely a source of stress 2	Sometimes a source of stress 3	Often a source of stress 4	Always a source of stress 5	Fx	N	\bar{X}	Rank
5	Expose to unfavourable physical working conditions including excessive heat, noise, crowding and insufficient space, etc	3	30	103	100	65	1097	301	3.64	1st
12	Job insecurity i.e threat of redundancy	2	34	109	86	70	1091	301	3.62	2nd
13	Lack of opportunity to develop ones skills and intellect in the job.	8	13	107	138	35	1082	301	3.59	3rd
11	Poor career development	9	16	117	109	50	1078	301	3.58	4th
21	Unclear about the goal and objectives of my department/unit.	5	28	125	80	63	1071	301	3.56	5th
4	Lack of control over work pace/method.	9	29	99	116	48	1068	301	3.55	6th
14	Long working hours.	1	32	133	90	45	1049	301	3.49	7th
6	Low/no participation in decision making.	8	36	103	115	39	1044	301	3.47	8th
35	Health challenges/crisis.	6	45	111	81	58	1043	301	3.47	9th
7	Little support from colleagues and supervisor.	2	31	123	116	29	1042	301	3.46	10th
9	Lack of power to decide when to take a break.	11	31	117	98	44	1036	301	3.44	11th
10	Inadequate break times/meal times	5	28	137	94	37	1033	301	3.43	12th
2	Unclear work tasks	8	45	109	92	47	1028	301	3.42	13th
8	No regular meeting to discuss work issues.	10	35	127	89	40	1017	301	3.38	14th
17	Low income	9	19	152	91	30	1017	301	3.38	15th
3	Meeting dead lines	10	39	126	83	43	1013	301	3.37	16th
34	Financial problem	9	50	110	86	46	1013	301	3.37	17th
15	Unfair distribution of work	11	33	128	101	28	1005	301	3.34	18th
33	Family crisis i.e. divorce, death of spouse, etc.	15	47	121	62	56	1000	301	3.32	19th
20	Lack of power to improve any unfavourable physical workloads.	11	41	127	85	37	999	301	3.32	20th
27	Often neglect personal needs because of the demands of my work	4	48	127	92	30	999	301	3.32	21st
18	No feedback from management /supervisor on work well done.	11	44	117	99	30	996	301	3.31	22nd
26	Always come home too tired to do the things I would like to do.	1	38	154	84	24	995	301	3.31	23rd
24	Family members exposed to work related hazards	10	37	134	95	25	991	301	3.29	24th
28	My Personal life suffers because of my work.	6	33	155	84	23	988	301	3.28	25th
23	Work interferes with family responsibilities/leisure time activities.	6	35	151	88	21	986	301	3.28	26th
29	Miss important personal activities due to the amount of time I spend working.	7	25	164	90	15	984	301	3.27	27th
16	Shift work i.e. working evenings, nights and weekends.	24	39	111	101	26	969	301	3.22	28th
22	Friction/anger between colleagues	8	59	114	101	19	967	301	3.21	29th
1	High work pace	27	50	122	59	43	944	301	3.14	30th
19	Experience violence from customers/members of the public.	12	67	127	77	18	925	301	3.07	31st
25	Home as the work place	24	50	137	71	19	914	301	3.04	32nd
32	Lack of self confidence	24	62	123	72	20	905	301	3.01	33rd
30	Being aggressive at work place	29	61	121	69	21	895	301	2.97	34th
31	Over committed to work	31	67	116	65	22	883	301	2.93	35th

Source: Field Survey, 2015

From the table 4 above majority of the respondents sometime sees 'exposure to unfavourable physical working conditions including excessive heat, noise, chemical, crowding and insufficient space' as well as 'job insecurity', 'lack of opportunity to develop one skills and intellect in the job', 'poor career development', 'unclear about the goal and objectives of my department', 'lack of control over work pace/method', 'long working hours', 'low or no participation in decision making', 'health challenges/crisis' etc as sources of stress. However, among the sources of work-related in the sampled companies, unfavourable physical working condition is the principal one with overall mean score of 3.64 while 'overcommitted to work' ($x = 2.93$) ranked least.

Table 5: Effects of work-related stress on the respondents

No. in the Questionnaire	Items	Never 1	Sometimes 2	Always 3	Fx	N	\bar{X}	Rank
8	I have difficulty finding enough time to relax	78	208	15	539	301	1.79	1st
9	If I finally find the time, it is hard for me to relax	116	145	40	526	301	1.75	2nd
1	I feel tense, anxious or have nervous indigestion	132	165	4	474	301	1.57	3rd
4	I have tension or migraine headaches, or pain in the neck or shoulder	136	162	3	469	301	1.56	4th
2	I seem to be low in energy	146	153	2	458	301	1.52	5th
6	I find it difficult to concentrate on what I'm doing because of worrying about other things	153	143	5	454	301	1.51	6th
7	I take pills, medicine, alcohol or other drugs to relax	163	138	0	439	301	1.46	7th
3	I eat/drink/smoke excessively in response to tension	172	126	3	433	301	1.44	8th
5	I seem to have trouble getting to sleep naturally or have difficulty getting back to sleep if awakened	185	115	1	418	301	1.39	9th
10	I find it difficult to laugh	187	113	1	416	301	1.38	10th

Source: Field Survey, 2015

Table 5 shows the effects of work-related stress on employees of the sampled companies. From the table, majority of the respondents sometimes experienced difficulty in finding enough time to relax and if finally find the time, it is hard for them to relax. Other major consequences of work related stress sometimes suffered by majority of the respondents include nervous indigestion, headache and pain (neck/shoulder). A further look at the table 5 also showed that most of the respondents never experienced sleep disorder, excessive smoking/drinking/eating, or resulted to taking of alcohol/drugs. However, among the consequences of work-related stress suffered by the respondent in the sampled companies, having difficulty in finding enough time to relax is the most common one with overall mean score of 1.79.

4 DISCUSSION OF RESULTS

This study reveals that work-related stress is a product of many factors ranging from those unique to job itself to personal factors. These factors as revealed by the study are consistent with other works in the literature, particularly that of Ihuoma (2013); the University of Cambridge (2014); Adetayo, et al (2014) Health and Safety Executive (2015); Oyungerel, et al (2015).

The first sources of work-related stress in the sampled companies as revealed by the study is unfavourable physical working condition; and these include excessive heat, noise, crowding and insufficient space. This source of work stress is a very crucial one. For instance, as regards excessive noise in work place, Pascual (1979:179) argues that:

noise has both physical and subjective effects. The physical effects of noise are to interfere with communication and to cause damage to hearing. The subjective effect is to cause annoyance.

Noise also affects employees' behaviours in different ways. For instance, noise decreases the quality of performance rather than its quantity (Broadbent and Little, 1960), cause people to walk faster and make less eye contact (Korte and Grant, 1994), decreases job satisfaction (Sundstrom, Town, Rice, Osborn and Brill, 1994), decreases performance on cognitive tasks (Cohen and Weinstein, 1981; Smith and Jones, 1992). Noise has also been found to have effects on employees' health and morale. For instance, research (Melamed, Fried and Froom, 2001) indicates that in addition to hearing loss, continued exposure to high levels of noise can raise blood pressure of employees in complex job; increase worker illness (Cohen, 1972), cause people to be less helpful (Fisher, Bell and Baum, 1984), and produce more aggression and irritability (Quigley, Leonard, and Collins, 2003). Interestingly, even low levels of office noise have been found to increase employees stress and reduce task motivation (Evans and Johnson, 2000).

Unfavourable working conditions also include exposure to heat, fumes and other potentially harmful substances/chemicals used in the production of goods. As regards the effect of heat on workers performance, Ajgaonkar (2006) argues that individuals working capacity and quality of output are affected in extreme temperature. Continuous physical work at high temperatures generates physiological or psychological changes in the body i.e increase in heart rate, and body temperature and oxygen consumption. These changes lead to the buildup fatigue in the body, thereby reducing the productivity of the individual (Ajgaonkar, 2006).

The foregoing suggests that thermal comfort is essential for human beings to perform at their optimal capacity. For most of the population carrying out continuous mental and physical tasks, the thermal temperature on which they would perform at the peak of their capacity is in comfortably cool conditions (Fleishman and Allusis, 1982). This may thus be the reason why an unfavourable physical working condition was the highest picked item by the respondents. This therefore suggests that environmental factors are the major source of stress in the sampled companies.

The second source of work-related stress, job insecurity, has been identified as one of the major sources of work stress by the WHO (2007); University of Cambridge (2014); and HSE (2015). Job insecurity normally occurs when organizational change happens, including reorganization, outsourcing, merger and acquisitions, and redundancies (European Agency for Safety and Health at Work, 2009). Employers may perceive these events as a way of increasing overall competitiveness, but researches (Armstrong, 1993; Chirumbolo and Hellgren, 2003; Sora, Caballer and Peiro, 2010; Adkins, Werbel and Farh, 2011) have shown that, job insecurity has a negative influence on employees' attitudes, including their job satisfaction and organizational commitment; as well as a positive relation to intention to leave the organization (Rosenblatt, Talmud and Ruvio, 1999; Chirumbolo and Hellgren, 2003).

The third and fourth sources of work stress that emerged from the study are lack of opportunity for workers to develop their skills and intellect in the job and poor career development. Workers not having opportunity to develop their skill and intellect in their job are being set up for failure and these may also put their organization at competitive disadvantages; however, when talent is fostered and nurtured, competitive advantages in performance are untainted. Thus the larger the gap between the skills required to perform task and the actual skills available for performing a task, the greater the lack of job satisfaction and the greater the increase in employee turnover with organization. As regards poor career development, a worker who remains on the same level since his/her first appointment for his entire working life might experience frustration and disillusionment and this may increase employee turnover and absenteeism. However, supporting employees' career development may boost employee commitment and job performance.

Other principal sources of work-related stress as revealed by the study and contained in the table 4 include unclear work task, health challenges/crisis, long working hours, low or no participation in decision making, low levels of support from colleagues and supervisors, work shift, high work pace, financial problems, and over-commitment to work. Explanation of each of these stressors is as follows:

Unclear work task is when worker lacks information about the requirements of his/her works, how those works are to be performed, and the evaluative procedures available to ensure that the task is performed successfully (Beehr, Walsh and Taber, 1976; Ursprung, 1986; Cooper, 1991; Cordes and Dougherty, 1993; Dyer and Quine, 1998). Unclear work task has been found to lead to such negative outcomes as reduced confidence, a sense of hopelessness, anxiety, and depression (Jackson and Schuler, 1995; and Muchinsky, 1997). Likewise, when workers are unclear about the goals and objectives of their department/unit they become unsure of what is expected of them and may end up doing their work task inefficiently. Misunderstanding may ensue and with confusion comes frustration, and with frustration comes conflicts, as employees may argue with each other or defy management

With regards to health challenges or crisis, workers who experience long term or chronic stress may potentially experience such debilitating illness as hypertension, coronary heart disease, stroke or peptic ulcer (Guyton, 1981; Lazarus and Folkman, 1984; Cooper and Cartwright, 1994; and Quick, Quick, Nelson and Hurrell, 1997). Moreover,

Humphrey (1998), in his review of the medical literature found that prolong and unyielding nervous tension developing from psychological stress can result in psychosomatic disorders which can lead to serious diseases which include cirrhosis of the liver, high blood pressure, cancer and heart disease. Stress is thus responsible for a vast and varied range of negative health outcomes that affect individuals in their workplace, hence the reason for its being among the major stressors highlighted by the respondents.

Again, the study reveals that long working hours and low or no participation in decision making contributed to work stress among employees in the sampled companies. The implication of long working hours is that it does not only affect workers productivity (thereby increasing a company's marginal costs) but increase the risk of accidents (due to tiredness), which may increase the costs of sick pay and compensation for company. It may also affect workers' long term health as well as impoverished family and social life, thus exacerbating the impact of work stress (Chan, Lai, Ko, and Boey, 2000). Low or no participation of workers in decision making, on the other hand, in an activity or event that affects them demoralize employees (Mankidy, 1984). While involving workers in decision making positively affect their morale and enhances their productive efficiency in an organization (Venna and Syha, 1991; Noah, 2008).

Low level of support from colleagues/supervisors and work shift are also contributors to work stress in the sampled companies. Low level of support from colleagues is related to higher level of distress following negative events (Rogers and Kreutzer, 1984). While work shift is an employment practice designed to make use of, or provide service across all 24 hours of the clock each day of the week (abbreviated as 24/7). The practices typically see the day divided into 'shifts', set periods of time during which different groups of workers take up their posts. Shift work includes both long-term night shifts and work schedules in which employees change or rotate shifts. Shift work is a risk factor for some health problems in some individuals, as disruption to circadian rhythms may increase the probability of developing psycho physiological dysfunction such as chronic fatigue, hypertension, heart disease, and gastrointestinal dysfunction (Costa, 1996). Shift work can also contribute to strain of marital, family, and personal relationship. These may significantly impact employee's performance and efficiency—leading to errors and accidents (Costa, 1996). Further enquiries were made from the respondents on the type of shift system that is in operation in their respective companies. The results of the enquiries shows that two of the companies were operating two-shift system which starts from 7am-7pm and 7pm-7am; while the remaining three companies were operating three-shift system starting from 6am-2pm, 2pm-9pm, and 9pm-6am respectively.

Furthermore, high work pace and experience of violence from customers or members of the public were also found to be sources of work stress in the sampled companies. High work pace has been associated with a range of stress-related symptoms including excessive tiredness, headache and a loss of temper (Townley, 2000). As regards experience of violence from customers or members of the public, workers who have limited option to deal with situations of violence from customers or members of the public are more susceptible to emotional turmoil (anxiety, tension and frustration), increased absenteeism, job turnover, strikes and demonstrations (Cooper and Payne, 1988; and Toohey, 1995). Additionally, violence from customers or members of the public often results in harmful consequences for organizational performance (Robbins, Waters-Marshi, Cacioppe and Milet, 1994).

Financial problems as well as time pressure were also key sources of stress discovered in the sampled companies. Hermann, Whitman, Wylar, Anton and Vanderzwagg (1990) in their studies report that financial strain was a significant predictor of emotional distress. Likewise, time pressure i.e inadequate breaks time/meal times, meeting deadlines, etc was found to have a strong negative relationship with work stress (Humphrey, 1998; Sauter and Hunell, 1999). Other research (Townley, 2000) found that a range of stress-related symptoms, including excessive fatigue and headache, were predominantly associated with unrealistic targets and deadlines.

The last sources of stress that emerged from the study are over-commitment to work. Over-commitment is a pattern of attitudes, behaviours and emotions characteristic of a person who works harder than what is demanded for a given task, and is driven by a high need for approval and control (Siegrist, 2001). Over-commitment is type A behaviour (Vrijkottee, Van Doornen and Degeus, 1999). Individual characterized by type A are described as ambitious, hard working, active, competitive, impatient and aggressive people, who lack the ability to relax (Mathews, 1982). Over-commitment is associated with stress and strain and a range of adverse health effects (Joksimovic, Starke, Knesebeck and Siergrist, 2002; Tsutsumi, Kayaba, Theorell and Siergrist, 2001; Preckel, Kanelvon, Kudielka and Fischer, 2005; and Siegrist, 2008). However, since majority of the respondents had knowledge of stress (as early found out in this study) before started working with the sampled companies, their picking over- commitment as the least source of stress is not surprising, and this indicates that majority of workers in the sampled companies had the knowledge of the consequences of over commitment to work and thus avoided it meaning that they avoid life becoming 'all work and no play'.

In respect of effects of work-related stress on employees in the sampled companies, the findings from the study agree with most of the studies in the literature. For instance, it surfaced from the study that workers under stress have difficulty in finding enough time to relax and if finally find the time, it is hard for them to relax. They also suffered from nervous indigestion, headaches, pain in neck/shoulder, and inability to concentrate and express their idea and

thought. These findings are consistent with that of Ihuoma (2013); Adetayo, et al (2014); the University of Cambridge (2014); Health and Safety Executive (2015); and Oyungerel, et al (2015). Findings from the study further show that most of the respondent never experienced excessive smoking/drinking/eating or resulted to taking of alcohol or drugs. These findings contradict those of Ihuoma (2013); Adetayo, et al (2014); the University of Cambridge (2014); Health and Safety Executive (2015); and Oyungerel, et al (2015). These scholars and institutions found workers experiencing stress eating/drinking/smoking excessively or misusing drugs.

5 CONCLUSION AND IMPLICATIONS OF THE STUDY

This study investigates the sources and effects of work-related stress among employees in foreign-owned manufacturing companies in Ogun State. Sources of work stress among employees in the selected companies as discovered by the study include workers' exposure to unfavourable physical working conditions such as excessive heat, noise, chemicals; job insecurity, poor career development, long working hours, low/no participation in decision making, among others. As a result workers are susceptible to physical and emotional harms such as restlessness, anxiety and nervous indigestion, headache, neck ache, and inability to concentrate.

This study however has implication for management of foreign-owned manufacturing organization, thus management of foreign-owned organization should provide conducive/friendly working environment for their employees by improving working facilities. This may be in form of purchasing modern equipments to control noise to an appreciable level. In addition, in order to avoid crowded workplaces, production units should be sited at different locations from the managerial unit.

Also, management of foreign-owned manufacturing companies should create better job security for their workers in order to increase their loyalty and commitment; as a loyal and committed staff hardly thinks of leaving an organization. This can be addressed through stable employment policy and better condition of service.

Finally, in order to reduce the incidence of pressures associated with meeting deadlines/targets, both management and employees should work closely to arrive at realistic production deadlines/targets for job delivery. In addition, management should provide substantial freedom, independence and discretion to employees in scheduling their works.

In literature, the effects of work-related stress is divided into two namely effects on the employees and effects on the organization. This study is however focused on the effects work-related stress have on the employees of foreign-owned manufacturing organization. Further research can be undertaken to ascertain effects of work stress on foreign-owned manufacturing organizations. Effort can also be made to examine the correlation between employee socio-demographics characteristics and work-related stress.

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