

THE INFLUENCE OF SOCIO-DEMOGRAPHIC FACTORS ON JOB STRESS LEVEL IN FOREIGN-OWNED MANUFACTURING COMPANIES IN OGUN STATE, NIGERIA

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ABSTRACT

This study examined the influence of socio-demographic factors on level of job stress in foreign-owned manufacturing companies in Ogun State, Nigeria with the specific objectives of investigating level of job stress as well as the socio-demographic characteristics influencing the job stress level. This study used cross sectional analytical design with quantitative approach. Data were collected using structured questionnaire and the data collected were statistically analyzed using percentage and weighted mean; while the hypotheses formulated were tested using spearman rank correlation and multiple regressions. The results of the study showed that with the exception of gender ($P < 0.05$; $\text{coeff } r = -0.003$), and employees' department ($P < 0.05$; $\text{coeff } r = -0.003$) that impacted negatively on employees stress level, other socio-demographic characteristics such as age ($P < 0.05$; $\text{coeff } r = 0.074$), marital status ($P < 0.05$; $\text{coeff } r = 0.125$), educational level ($P < 0.05$; $\text{coeff } r = 0.037$), employees' cadre ($P < 0.05$; $\text{coeff } r = 0.038$), years of working experience ($P < 0.05$; $\text{coeff } r = 0.146$), income ($P < 0.05$; $\text{coeff } r = 0.025$) and employees' position ($P < 0.05$; $\text{coeff } r = 0.103$) had positive impacts on the employees' job stress level. This concludes that socio-demographic factors exert significant influence on employees' job stress level. It is recommended that employers should always take into consideration employees' socio-demographic characteristics when assessing their job stress level because it can provide useful information on specific individual characteristics influencing stress level in workplace.

Keywords: socio-demographic, stress, employees, cross sectional analytical, Ogun

ABSTRAK

Penelitian ini menguji pengaruh faktor sosio-demografis pada tingkat stres kerja di perusahaan manufaktur milik asing di Ogun, Nigeria dengan tujuan khusus menyelidiki tingkat stres kerja serta karakteristik sosio-demografis yang memengaruhi tingkat stres kerja. Penelitian ini menggunakan rancangan cross sectional analytical dengan pendekatan kuantitatif. Data dikumpulkan menggunakan kuesioner terstruktur dan data yang dikumpulkan dianalisis secara statistik menggunakan persentase dan rata tertimbang; sedangkan hipotesis dirumuskan diuji menggunakan korelasi rank spearman dan regresi. Hasil penelitian menunjukkan bahwa dengan pengecualian gender ($P < 0,05$; $\text{coeff } r = -0,003$), dan departemen karyawan ($P < 0,05$; $\text{coeff } r = -0,003$) yang berdampak negatif pada tingkat stres karyawan. Karakteristik demografi seperti usia ($P < 0,05$; $\text{coeff } r = 0,074$), status perkawinan ($P < 0,05$; $\text{coeff } r = 0,125$), tingkat pendidikan ($P < 0,05$; $\text{coeff } r = 0,037$), kader karyawan ($P < 0,05$; $\text{coeff } r = 0,038$), tahun pengalaman kerja ($P < 0,05$; $\text{coeff } r = 0,146$), pendapatan ($P < 0,05$; $\text{coeff } r = 0,025$) dan posisi karyawan ($P < 0,05$; $\text{coeff } r = 0,103$) memiliki dampak positif pada tingkat stres kerja karyawan. Dengan demikian, menyimpulkan bahwa faktor-faktor sosio-demografis memberikan pengaruh signifikan terhadap tingkat stres kerja karyawan. Dengan demikian, direkomendasikan bahwa pengusaha harus selalu mempertimbangkan karakteristik sosio-demografis pertimbangan karyawan ketika menilai tingkat stres pekerjaan mereka karena dapat memberikan informasi yang berguna pada karakteristik individu tertentu yang memengaruhi tingkat stres di tempat kerja.

Kata kunci: sosio-demografis, stres, karyawan, cross sectional analytical, Ogun

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INTRODUCTION

Every one experiences stress in their daily life, and this may be in the form of positive or negative stress. If positive, it may give us motivation and evoke us to achieve optimum target and further successes; however, if negative, it can make us stressful, distressful and emotionally affected (Charanjeev, Sunita and Ravinder, 2011). Stress is; thus, defined as a tension experienced by individuals facing too many demands/challenges. One of the forms of stress is job stress, and it is the harmful physical and emotional responses that occur when there is a discrepancy between job demands and amount of control an employee has in meeting these demands (Canadian Mental Health Association, 2005). Job related stress is a product of a large number of factors interacting together. These include (i) factors unique to the job such as work load (overload and under load), pace/variety/meaningfulness of work, physical environment (noise, air quality, isolation at the work place), emotion or working alone, and autonomy (ability to make a decision about one's work/specific tasks) (ii) role in the organization i.e. role conflict (conflicting job demands, multiple supervisors/managers), role ambiguity (lack of clarity about responsibility, expectation), and level of responsibility (iii) career development (under/over promotion), job security (fear of redundancy which may arise either from economy or a lack of tasks or work to do), career development opportunities, and overall job satisfaction (iv) relationships at work (interpersonal---supervisors, co-workers, subordinates), threat of violence, harassment, and threat to personal safety, and (v) organizational structure/climate i.e. participation or non-participation in decision making, management style and communication patterns (Murphy, 1995).

Stress experienced by individuals in workplace varies, and one of the factors responsible for these variations is changes in demography (Canadian Mental Association, 2005). Efforts have; however, been made to research into the influence of demographic factors on level of job stress. For instance, Oweke, Muola and Ngumi (2014) examined the relationship between gender and level of stress. Results of the study showed a positive relationship between gender and level of stress. This finding; however, contradicted the results of the studies conducted by ILO (2001) and Park (2007) that revealed a negative relationship between gender and level of stress, and women were found to be more likely to experience negative effects of stress than men. Also, when it comes to how men and women react to stress

over the long-term, Wichert (2002) found that men tend to show a physical deterioration as a response to stressful situations, whereas women generally exhibit psychological symptoms.

In regard to age, a study conducted by Santo deOliveira et al. (2012) revealed that age has a positive influence on level of stress. This result; however, contradicted what has been revealed by Balakrishnamurthy and Shankar (2009) who found a negative relationship between age and level of stress. Also, Popoola and Ilugbo (2010) in their study on the relationship between marital status and level of job stress found a significant positive relationship between marital status and level of job stress. This finding; however, contradicted that of Bloom et al. (2007) indicating there is no significant relationship between marital status and daily stress level. In terms of educational level, Bjelland et al. (2008) reported a positive relationship between educational level and job stress level. Furthermore, Rajeshwari (1992) on his study on the relationship between employee's cadre and level of job stress found an inverse relationship between the two variables. Also, Balakrishnamurthy and Shankar (2009) examined the relationship between years of working experience and level of job stress; the result of the study showed a negative relationship between years of working experience and employees' level of stress.

Income has been found to have a negative relationship with level of job stress as revealed by the study conducted by the American Psychological Association (2011) and by Pagah, Leila and Azlina (2013). Also, Karthi and Venugopal (2013) in their study on the relationship between employees' department and level of stress reported a significant positive relationship between the two variables; while Parilla (2011) in his study on the relationship between employees' job position and their level of stress found a positive and significance relationship between the two variables.

However, despite the efforts of the previous researchers, most of the studies were limited to Europe and Asia; and the few ones noted in Nigeria focused on teachers (Popoola and Ilugbo, 2010), and on librarians (Aniebiet, 2015), and none on the employees of foreign-owned manufacturing organizations. This current study; therefore, seeks to extend the scope to foreign-owned manufacturing organizations where knowledge on the influence which socio-demographic factors have on the level of job stress is limited.

The general objective of this study is to examine the influence of socio-demographic factors on level of job stress in foreign-owned manufacturing companies in Ogun State, Nigeria. The specific objectives of the study are: (i) To investigate the level of job stress in foreign-owned manufacturing companies in Ogun State; (ii) To identify the socio-demographic factors that influence level of job stress in foreign-owned manufacturing companies in Ogun State, Nigeria.

METHODS

This study was carried out in Ogun State from November to December, 2015. The state is in the southwestern Nigeria, and it covers a large land area of about 6,422 square miles or 16,762 square kilometers. It is located between latitude 60N and 80N and longitude 2½ E and 50E. The state is 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). The choice of Ogun State for this study was based on the fact that the state has several international businesses and factories strategically sited across the length and breadth of the state. These international businesses include Nestle, Reckitt Benckiser Nigeria Limited, Gpee Industries Limited, etc.

This study used a cross sectional analytical design with quantitative approach. This design is considered appropriate since the aim of the study is to analyze the influence of socio-demographic factors on level of job stress across foreign-owned manufacturing organizations in Ogun State.

The study population comprises the employees of foreign-owned manufacturing companies in Ogun State including the junior, senior and the management staff. Multi-stage sampling approach (sampling in stages/phases) was used to select samples with the first stage involving the purposive selection of all the five categories of foreign-owned manufacturing companies in Ogun State. The second stage involved the selection of one company from each of the categories using simple random sampling technique via balloting, while the third stage involved the selection of sample of respondents. A total of 301 respondents were chosen from the total population of workers (N=1226) in the selected companies using Yamane's (1967) sample size determination formula of $n = \frac{N}{1+N(e^2)}$ where n =

required sample size, N = total population, e^2 = sampling error (0.05), and 1= constant. Sample size in each of the five selected companies was; thereafter, determined proportionally; and in selecting respondents in each of the chosen companies, stratified random sampling technique was used.

Structured questionnaire was used to obtain data for both independent and dependent variables of the study. The independent variable includes the socio-demographic characteristics of the respondents, and it involved the following information: gender (coded as male and female), age (coded as less than 20 years, 20–29 years, 30–39 years, 40–49 years, and 50 and over), marital status (coded as married, never married, divorced, separated but not divorced, and widowed), educational level (coded as no formal education, primary school certificate, secondary school certificate, Diploma (OND/NCE), Bachelor degree, Master degree, Doctorate PhD), year of working experience (coded as less than 5 years, 5–10 years, 11–15 years, 16–20 years, and more than 20 years), monthly income (coded as less than 20,000 Naira, 21,000–40,000 Naira, 41,000–60,000 Naira, 61,000–80,000 Naira, 81,000–100,000 Naira, and over 100,000 Naira, employees' department (coded as administration, account/finance, engineering/technical, store/warehousing, marketing/advertising, others), current position of the respondents (coded as manager, supervisor, accountant, engineer, marketer, and others).

The dependent variable of the study is the respondents' level of job stress. However, to measure this, respondents' perception of stress was first of all measured using 20 items. Of the 20 items, 12 were adapted from Park (2007) Job Content Questionnaire, and the remaining 8 were adapted from Addae and Wang (2006) Job Stress Questionnaire (JSQ). Respondents were instructed to rate the items using five point rating scale (where 1 means "strongly disagree"; 2 means "disagree"; 3 means "neutral"; 4 means "agree"; and 5 means "strongly agree"). Respondents' overall level of stress was then measured using one item, and the respondents were asked to rate the item using another five point rating scale (where 1 means "very low level of stress"; 2 means "low level of stress"; 3 means "moderate level of stress"; 4 means "high level of stress"; and 5 means "very high level of stress"). The instrument adapted in this study originally had cronbach alpha ranging from 0.76–0.86. However, before using the instrument in this current study, it was subjected to pilot testing (to

determine its level of reliability) where 25 copies of the questionnaire were administered to 25 respondents in foreign-owned manufacturing companies different from the company samples, and a cronbach alpha of 0.77 was obtained.

The data collected were processed using Statistical Package for Social Sciences (SPSS) version 20, and statistically analyzed using frequencies, %ages, and weighted mean to describe respondents' socio-demographic characteristics, perception of stress and level of stress. The hypotheses formulated were tested using spearman rank correlation to test for the relationship between socio-demographic characteristics and level of job stress while the multiple regression was used to test for the impact of socio-demographic characteristics on level of job stress.

Research Hypotheses

- (i). Ho: There is no significant relationship between socio-demographic characteristics and level of job stress.
- (ii). Ho: Socio-demographic characteristics have no significant impact on level of job stress.

RESULTS

Socio-demographic Characteristics of the Respondents

The socio-demographic characteristics of the respondents in Table 1. In regard to gender of the respondents, in Midland Galvanizing Product Limited, majority (81.08%) of the respondents were male while the rest (18.92%) was female. In Watson Global Pharmaceutical Industries Limited, more than half (63.27%) of the respondents were male while the remaining (36.73%) respondents were female. Also, in Shongai Packaging Industry Limited, the substantial (71.11%) number of respondents was male while the rest (28.89%) was female. In addition, in Alucan Packaging Industry Limited, about 70.73% were male while 29.27% were female. Similarly, in De-United Foods Industries Limited, most of the respondents (70.73%) were male while 29.27% were female. Overall, males dominate females in all the companies

sampled in this study. For instance, male group has an overall %age of 73.09 while the remaining proportion (26.91%) comprises female.

In regards to the age of the respondents, there were more respondents aged between 30 and 39 years across the sampled companies than those in other age categories. For instance, those whose ages fall between 30-39 years were 50.17%, compared to 27.24% of those aged between 40 and 49 years, 13.95% of those between ages 20-29 years, 6.98% of those between ages 50-59 years, 1.00% of those above ages 60 years, and 0.66% of those whose age is less than 20 years. All in all, this result indicates that most of the respondents are young and they are in their productive age. Furthermore, the marital status of the respondents showed that majority (65.12%) of the respondents across the sampled companies are married, 21.59% never married, 6.64% were separated but not divorced, 5.65% were divorced while 1.00% had lost their spouse to death (widowed). Again, the educational level of the respondents showed that majority of them have tertiary education certificate (87.04%), about 10.30% have primary school certificate while the remaining (2.66%) respondents have primary school certificate. This findings indicate that majority of the respondents are literate.

Also, respondents' cadre showed that in Midland Galvanizing Products Limited, 54.05% were junior staff, about 29.73% were senior staff and the remaining 16.22% were management staff. Similarly, in Watson Global Pharmaceutical Industries Limited, most of the respondents (59.18%) were junior staff; about 28.57% were senior staff while 12.24% were management staff. In addition, in Shongai Packaging Limited, the majority (60.00%) was junior staff and approximately 26.67% were senior staff while the remaining 13.33% were management staff. Also, in Alucan packaging Limited, about 59.57% were junior staff, 29.79% were senior staff, while the rest (10.64%) were management staff. In De-United Foods Industries Limited, the majority (62.60%) of the respondents was junior staff and about 31.71% were senior staff while the rest (5.69%) were management staff. Overall, there are more respondents at the junior cadre (60.13%) than in senior cadre (29.90%) and management cadre (9.97%).

Table 1. Respondents' socio-demographic characteristics

Variables	Midgal (N=37)		Watson (N=49)		Shongai (N=45)		Alucan (N=47)		De-United (N=123)	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Gender										
Male	30	81.08	31	63.27	32	71.11	40	85.11	87	70.73
Female	07	18.92	18	36.73	13	28.89	07	14.89	36	29.27
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0
Age										
<20	0	0.00	0	0.00	0	0.00	0	0.00	02	1.63
20–29	04	10.81	04	8.16	04	8.89	03	6.38	27	21.95
30–39	18	48.65	26	53.06	24	53.33	23	48.94	60	48.78
40–49	12	32.43	17	34.69	12	26.67	17	36.17	24	19.51
50 and over	03	8.11	02	4.08	05	11.11	04	8.51	10	8.13
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0
Marital Status										
Married	27	72.97	34	69.39	31	68.89	28	59.57	76	61.79
Never married	06	16.22	09	18.37	09	20.00	09	19.15	32	26.02
Divorced	01	2.70	02	4.08	01	2.22	06	12.77	07	5.69
Separated but not divorced	03	8.11	04	8.16	03	6.67	03	6.38	07	5.69
Widowed	0	0.00	0	0.00	01	2.22	01	2.13	01	0.81
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0
Educational Level										
No formal education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Primary school cert	0	0.00	0	0.00	01	2.22	01	2.13	06	4.88
Secondary school cert	03	8.11	04	8.16	05	11.11	05	10.64	14	11.38
Diploma (OND.NCE)	20	54.05	22	44.90	21	46.67	23	48.94	52	42.28
Bachelor degree/HND	08	21.62	18	36.73	12	26.67	13	27.66	45	36.59
Master's degree	06	16.22	05	10.20	06	13.33	05	10.64	06	4.88
Doctorate (PhD)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0
Employment Cadre										
Junior staff	20	54.05	29	59.18	27	60.00	28	59.57	77	62.60
Senior staff	11	29.73	14	28.57	12	26.67	14	29.79	39	31.71
Management staff	06	16.22	06	12.24	06	13.33	05	10.64	07	5.69
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0
Years of Working Experience										
<5 years	05	13.51	11	22.45	07	15.56	04	8.51	40	32.52
5–10years	13	35.14	23	46.94	23	51.11	17	36.17	60	48.78
11–15 years	14	37.84	10	20.41	12	26.67	19	40.43	16	13.01
16–20 years	04	10.81	05	10.20	03	6.67	07	14.89	07	5.69
>20 years	01	2.70	0	0.00	0	0.00	0	0.00	0	0.00
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0

Table 1. Respondents' Socio-Demographic Characteristics (continuance)

Variables	Midgal (N=37)		Watson (N=49)		Shongai (N=45)		Alucan (N=47)		De-United (N=123)	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Monthly Income (Naira)										
<20,000	0	0.00	0	0.00	0	0.00	0	0.00	13	10.57
21,000–40,000	05	13.51	04	8.16	06	13.33	04	8.51	25	20.33
41,000–60,000	0	0.00	09	18.37	06	13.33	04	8.51	31	25.20
61,000–80,000	15	40.54	19	38.78	16	35.56	21	44.68	19	15.45
81,000–100,000	07	18.92	09	18.37	11	24.44	10	21.28	28	22.76
>100,000	10	27.03	08	16.33	06	13.33	08	17.02	07	5.69
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0
Employees Department										
Administration	05	13.51	05	10.20	08	17.78	08	17.02	22	17.89
Account/Finance	06	16.22	06	12.24	06	13.33	07	14.89	13	10.57
Engineering/Technical	05	13.51	05	10.20	07	15.56	08	17.02	23	18.70
Store/Warehousing	05	13.51	05	10.20	05	11.11	08	17.02	10	8.13
Marketing/Advertising	04	10.81	05	10.20	06	13.33	05	10.64	16	13.01
Others	12	32.43	23	46.94	13	28.89	11	23.40	39	31.71
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0
Current Position										
Manager	04	10.81	03	6.12	04	8.89	05	10.64	03	2.44
Supervisor	17	45.95	25	51.02	19	42.22	19	40.43	48	39.02
Accountant	01	2.70	01	2.04	03	6.67	02	4.26	04	3.25
Engineer	04	10.81	05	10.20	05	11.11	07	14.89	13	10.57
Marketer	03	8.11	05	10.20	06	13.33	03	6.38	11	8.94
Others	08	21.62	10	20.41	08	17.78	11	23.40	44	35.77
Total	37	100.0	49	100.0	45	100.0	47	100.0	123	100.0

Respondent's years of working experience showed that 45.18% of them have 5–10 years of working experience, followed by those who have between 11–15 years (23.59%) of working experience. About 22.26% of the total number of respondents have less than 5 years of working experience, 8.64% have between 16–20 years of working experience while the remaining (0.33%) respondents have a working experience of over 20 years. Moreover, in regards to the respondents' income, the majority (29.90%) earned between 61,000–80,000, followed by those who earned between 41,000–60,000 (16.61%), between 20,000–40,000 (14.62%) and above 100,000 (12.96%), and those earned less than 20,000 (4.32%).

Also from the Table 1, it is obvious that the respondents used in this study cut across the entire departments of the sampled companies. Involving respondents from different departments in a study increases the credibility of the study as well as prevents information

bias. In regards to respondents current position in the sampled companies, those who are supervisors were in majority with 42.52%, followed by other categories of staff such as production assistant, security assistant, biochemist, microbiologist (26.91%), engineers (11.30%), marketers (9.30%) managers (6.31%) and accountants (3.65%).

From the Table 2, there was high level of agreement among respondents with the statement 'my job requires me to learn new things' while there was least agreement among respondents with the statement 'my job security is good'. Generally, although learning new things in workplace may sometimes be stressful, it has the advantages of helping workers to expand their knowledge and think of new ideas. It also enables workers to perform their job well and effectively. Additionally, it keeps workers on the cutting edge of their profession or workplace.

Table 2. Respondents' perception on stress

No in the Questionnaire	Items	Strongly Disagree	Dis-agree	Neutral	Agree	Strongly Agree	Fx	N	X	Rank
		1	2	3	4	5				
1	My job requires that I learn new things	0	11	68	132	90	1204	301	4.00	1 st
6	My job is very hectic	7	8	85	121	80	1162	301	3.86	2 nd
2	My job requires a high level of skill	0	4	112	131	54	1138	301	3.78	3 rd
9	My job requires a lot of physical efforts	2	17	148	102	32	1048	301	3.48	4 th
4	My job requires that I do things over and over	13	32	102	127	27	1026	301	3.41	5 th
14	Working with my company leaves me little time for other activities	0	35	163	79	24	995	301	3.31	6 th
13	My job makes it hard for me to spend enough time with my family	6	31	161	83	20	983	301	3.27	7 th
12	The people I work with are helpful in getting my job done	2	43	163	81	12	961	301	3.19	8 th
11	My supervisor is helpful in getting my job done	1	41	172	78	9	956	301	3.18	9 th
10	I am exposed to hostility or conflict from the people I work with	13	42	147	88	11	945	301	3.14	10 th
20	Too many people at my level in the company get stressed-up by job demands	2	48	171	67	13	944	301	3.14	11 th
17	I frequently get the feeling that I am married to my company	25	57	119	74	26	922	301	3.06	12 th
16	I sometime feel like I never have a day off	7	63	151	71	9	915	301	3.04	13 th
18	Sometime when I think about my job I get scared or worried	22	61	132	70	16	900	301	2.99	14 th
3	I have freedom to decide how I do my job	44	41	112	90	14	892	301	2.96	15 th
5	I have a lot to say about what happens in my job	49	60	81	89	22	878	301	2.92	16 th
19	I always feel nervous as a result of my job	30	68	123	57	23	878	301	2.92	17 th
7	I am free from conflicting demands that others make	27	54	141	79	0	874	301	2.90	18 th
15	I sometime dread the telephone ringing at home because the call might be job-related	28	69	121	74	9	870	301	2.89	19 th
8	My job security is good	74	67	83	67	10	775	301	2.57	20 th

Source: Field Survey, 2015

Job security, on the other hand, is the probability that an individual will keep his/her job. A job with high level of job security is such that a person with the job would have a small chance of becoming unemployed. However, from the Table 2, 'my job security is good' was the least picked item by the respondents in the sampled companies. This indicates that respondents' job security in the sampled companies is poor. Poor job security means that workers are facing a high risk of job loss in the sampled companies.

From the Table 3, the respondents who reported to be at the moderate level of stress were in majority (61.50%), followed by those who reported high level of stress (22.90%), very high level of stress (7.00%), very low level of stress (6.00%), and low level of stress (2.70%). However, by collapsing the respondents' answers into three groups of (i) low (ii) moderate, and (iii) high levels of stress, the number respondents who reported moderate level of stress was higher than that of those who reported high and low levels of stress. Based on this, respondents in the sampled companies were found to have moderate level of stress. Moderate level of stress is a comfortable level of stress which has been identified by scholars such as Ivancevich and Mattenson (1990); and Muse, Harris, and Field (2003) to improve productivity, increase energy levels, and heighten creativity.

Hypotheses Testing

1. Hypothesis 1

Ho: There is no significant relationship between socio-demographic characteristics and level of job stress

Hi: There is significant relationship between socio-demographic characteristics and level of job stress

The results of the above hypothesis are presented in Table 4. The results in Table 4 showed that of all the employees' socio-demographic characteristics, only 'Gender' and employees' 'Department' impact negatively on the level of job stress experienced while the other employees' socio-demographic characteristics have a positive impact on the level of job stress experienced. However, for the employees' socio-demographic characteristics under this study, only 'marital status' and 'years of working experience' have a significant relationship with level of job stress at 5%.

In addition to the foregoing, regression analysis was carried out to examine the impact of each the socio-demographic variable on employees' level of job stress by formulating the hypothesis. The multiple regression model is:

$$y_1 = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \beta_9 x_9$$

Explanation:

- y_1 : Level of job stress experienced
- x_1 : Gender
- x_2 : Age
- x_3 : Marital status
- x_4 : Educational level
- x_5 : Cadre
- x_6 : Years of working experience
- x_7 : Income
- x_8 : Department
- x_9 : Position

Table 3. Respondents' overall level of job stress

Name of companies	Very low	Low	Moderate	High	Very high	Total
Midland Galvanizing Products Ltd	0(0.00%)	1(2.70%)	33(89.20%)	2(5.40%)	1(2.70%)	37(100.00%)
Watson Global Pharmaceutical Ind.	3(6.10%)	3(6.10%)	33(67.30%)	8(16.30%)	2(4.10%)	49(100.00%)
Shongai Packaging Ind Ltd	3(6.70%)	0(0.00%)	27(60.00%)	12(26.70%)	3(6.70%)	45(100.00%)
Alucan Packaging Ltd	2(4.30%)	0(0.00%)	24(51.10%)	18(38.30%)	3(6.40%)	47(100.00%)
De-United Industries Ltd	10(8.10%)	4(3.30%)	68(55.30%)	29(23.60%)	12(9.80%)	123(100.00%)
Total	18(6.00%)	8(2.70%)	185(61.50%)	69(22.90%)	21(7.00%)	301(100.00%)

Table 4. Correlation between Socio-demographic characteristics and level of job stress

Employee's socio-demographics	Mean	Std. Deviation	P-Value	Significant level
Gender	30.10	10.52	-0.003	0.956
Age	39.55	7.81	0.074	0.202
Marital status	12.01	7.67	0.125*	0.030
Educational level	10.03	6.25	0.037	0.518
Cadre	20.07	11.23	0.038	0.513
Years of working experience	9.68	1.73	0.146*	0.011
Income	73,985.80	10,726.56	0.025	0.661
Department	10.03	3.61	-0.003	0.961
Position	10.03	6.15	0.103	0.073

* Correlation is significant at the 0.05 level (2-tail)

Table 5. Impact of employees' socio-demographic characteristics on their level of job stress

	B	Std. Error	Sig.	R	R2	Adj R2
Constant	2.458	0.435		0.225	0.051	0.021
Gender	0.103	0.114	0.364			
Age	0.041	0.07	0.558			
Marital status	0.091	0.053	0.086			
Educational level	-0.052	0.101	0.605			
Cadre	-0.032	0.128	0.804			
Years of working experience	0.183	0.076	0.017*			
Income	-0.01	0.07	0.887			
Department	0.017	0.027	0.539			
Position	0.057	0.031	0.065			

* Correlation is significant at the 0.05 level (2-tail)

2. Hypothesis 2

Ho: Socio-demographic characteristics have no significant impact on level of job stress

Hi: Socio-demographic characteristics have significant impact on level of job stress

The results of the hypothesis 2 above are presented in table 5. Thus, The Level of job stress experienced predictive model is deduced as:

$$y_1 = 2,458 + 0,103x_1 + 0,041x_2 + 0,091x_3 - 0,052x_4 - 0,032x_5 + 0,183x_6 - 0,01x_7 + 0,017x_8 + 0,057x_9$$

$\beta_0 = 2.458$ implies that without prior knowledge of the employees socio-demographic characteristics {Gender, Age, Marital status, Educational level, Cadre, Years of working experience, Income, Department, Position}, the level of job stress would be 2.458.

$\beta_1 = 0.103$ implies that for every unit increase in the number of men or women (gender) the level of job stress would increase by 0.103 while Age, Marital status, Educational level, Cadre, Years of working experience, Income, Department and Position remain constant. The positive sign suggests that there is a positive relationship between gender and level of job stress. This indicates that increase in the number of men or women employees will bring about a rise in the level of job stress because the workers will have to study the new employee in order to know how to relate with him/her. This finding supports Oweke et al. (2014) who reported a positive relationship between gender and level of stress. The finding of this study; however, contradicts that of ILO (2001) and Matud (2004) indicating a negative relationship between gender and level of stress.

$\beta_2 = 0.041$ implies that for every unit increase in the Age, the level of job stress would increase by 0.041 while Gender, Marital status, Educational level, Cadre, Years of working experience, Income, Department and Position remain constant. The positive sign suggests that there is a positive relationship between age and level of job stress, thus indicating that increase in age of the employees will bring about a rise in their level of job stress. This may be due to the fact that when someone is getting older, she or he becomes weaker; this in one way or another increases her or his stress level. This finding supports that of Santo deOliveira, et al (2012) indicating a positive influence between age and level of stress and that the older a worker is the higher his/her level of stress. The result of this study; however, contracts that of Balakrishnamurthy and Shankar (2009). These scholars in their study found a negative relationship between age and level of stress.

$\beta_3 = 0.091$ implies that for every unit changes in the Marital status, gender, age, educational level, cadre, years of working experience, length of service, income, department and position remain stable, and the level of job stress would increase by 0.091. The positive sign suggests that there is a positive relationship between the marital status and the level of job stress. This indicates that changes in marital status, for instance, from single to married or from married to divorce, etc will bring about a rise in the level of job stress. This result is supported by that of Popoola and Ilugbo (2010) who found significant positive relationship between marital status and level of stress. Divorced women were; however, experienced more stress. The results of this study; however, opposed that of Bloom et al. (2007) indicating no significant relationship between marital status and daily stress level.

$\beta_4 = -0.052$ implies that for every unit increase in the Educational level when Gender, Marital status, Age, Cadre, Years of working experience, Income, Department and Position remain constant, the level of job stress experienced would decrease by 0.052. The negative sign suggests that there is an inverse relationship between educational level and level of job stress. This indicates that increase in educational level will bring about a fall in the level of job stress. This finding; however, contradicts that of Bjelland et al. (2008) who reported positive relationship between educational level and level of job stress; low educational level was found to be associated with both anxiety and depression while higher educational level seems to

have a protective effect against anxiety and depression which accumulate throughout life.

$\beta_5 = -0.032$ implies that for every unit increase in the 'Cadre' when Gender, Marital status, Age, Educational level, Years of working experience, Income, Department and Position are kept constant, the level of job stress would decrease by 0.032. The negative sign suggests that there is an inverse relationship between the employees' Cadre and the level of job stress. This indicates that increase in Cadre will bring about a fall in the level of job stress experienced as employees in senior cadre, for instance, sometimes have supportive staff who may be assisting him/her in his/her responsibility. This finding confirmed that of Rajeshwari (1992) who reported inverse relationship between employees' cadre and level of stress; meaning the lower the employees' cadre, the higher his/her level of stress and the higher the employees' cadre, the lower his/her level of stress.

$\beta_6 = 0.183$ implies that that there is an increase in every unit of the 'Years of working experience' when the %age of Gender, Age, Educational level, Cadre, Marital status, Income, Department and Position remain constant, the level of job stress would increase by 0.183. The positive sign suggests that there is a positive relationship between the years of working experience and the level of job stress. This indicates that increase in years of working experience will bring about a rise in the level of job stress experienced. This finding; however, was opposed that of Balakrishnamurthy and Shankar (2009) who reported a negative relationship between years of working experience and employees' stress level.

$\beta_7 = -0.01$ implies that for every unit increase in the respondents' income when Gender, Marital status, Age, Cadre, Years of working experience, Educational level, Department and Position are kept constant, the level of job stress experienced would decrease by 0.01. The negative sign suggests that there is a negative relationship between the Income and the level of job stress experienced. This indicates that increase in employee's income will bring about a fall in the level of job stress. This result is supported by that of Pagah et al. (2013) which reported negative relationship between employee's income and level of depression and stress; and that of the American Psychological Association (2011) who found that low income significantly impacts workers' level of stress.

$\beta_8 = 0.017$ implies that for every unit change in the Department when Gender, Age, Educational level, Cadre, Marital status, Income, Years of working experience, and Position are kept constant, the level of job stress would increase by 0.017. The positive sign suggests that there is a positive relationship between the Department and the level of job stress. This indicates that changes in Department will bring about a rise in the level of job stress because the employees will have to learn the ethics of his/her new department which are sometimes stressful. This finding is supported by that of Karthi and Venugopal (2013) who revealed significant positive relationship between employees' department and level of stress.

$\beta_9 = 0.057$ implies that for every unit increase in the Position when Gender, Age, Educational level, Cadre, Marital status, Income, Years of working experience and Department are kept constant, the level of job stress would increase by 0.057. The positive sign suggests that there is a positive relationship between the Position and the level of job stress. This indicates that increase in respondents' position will bring about a rise in their level of job stress because a new position brings a new or additional responsibility. This finding is supported by that of Parilla (2011) who reported positive and significant relationship between employees' job position and their level of stress in which case, middle level management was found to be experiencing the highest level of stress in the organization than workers in the other categories.

The regression analysis above shows that of all the employees' socio-demographic characteristics under the study, only the 'years of working experience' (significance value of 0.017 which is less than $\alpha = 0.05$) independently exerts significant influence on the respondents level of job stress or only the years of working experience is significant in predicting the respondents level of job stress at significance level of 5%.

To measure the strength of the relationships between the dependent/explained (Level of job stress) variables and independent/explanatory ($x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8$ and x_9) variables, multiple regression coefficient (R) was used. From the result in table 5, the R value of 0.225 indicates that there is a weak positive but imperfect relationship between the employees' socio-demographic characteristics and their level of job stress. To measure how the regression line fits the

data, multiple coefficient of determination (R^2) was used. In other words, R^2 measures how the variation in the dependent variable is being accounted for by the independent variables. From the result in table 5, the R^2 is 0.051. This implies that approximately 5.1% variation in the level of job stress is being explained by the employees' socio-demographic characteristics (gender, age, marital status, educational level, cadre, years of working experience, income, department and position).

Managerial Implication

This study; however, has a number of implications for employers in foreign-owned manufacturing organizations. Based on this, it is recommended that employers should always take into consideration their employees' socio-demographic characteristics when assessing their job stress level because it can provide useful information on specific individual characteristics influencing the stress level in workplace.

CONCLUSIONS AND RECOMMENDATIONS

This study examined the influences of socio-demographic factors on employees' level of stress in foreign-owned manufacturing companies in Ogun State with the specific objectives of investigating the level of job stress of employees as well as the socio-demographic characteristics influencing such level of job stress. The results showed that employees in the companies studied have a moderate level of stress, and apart from the employees' gender and department that have impacted negatively on their level of job stress, other socio-demographic characteristics such as age, marital status, educational level, employees cadre, years of working experience, income and employees position have positive impacts on employees' level of job stress. This study; thus, concludes that employees' socio-demographic factors exert significant influence on their level of job stress.

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