Psychosocial Factors Associated With Workplace Related Stress: A Nigerian University Academic Staff Experience

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I. INTRODUCTION

Several studies have examined the influence of various psychosocial factors in relation to occupational stress in diverse organizations. Apart from occupational stress, the other challenges being faced by the academic staff even in Nigerian universities include; workplace safety, mental health issues, poor balance in workload management, issues with organisational structure; poor psychological support; issues with academic growth and development, and recognition and reward (Centre for Human Services, 2000). In addition to the stress arising from the academic related factors, university teachers may also experience stress that are related to the non-academic circumstances to which they could also be exposed.

According to the National Institute for Occupational Safety and Health (1999), Stress resulting from work-related factors has been defined as the harmful physical, cognitive and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Although Selye (1956), defined stress as a fundamental aspect of the normal fabrics of human way of life. It is an inevitable part of the challenges that tend to be associated with prompt mastery of new skills and behavioural pattern (Sauter, Murphy & Hurrell Jr., 1990). There is always a disruption in physiological, emotional, and cognitive functioning which is antithetical to efficient services and high productivity, when stress becomes excessive in an individual's experiences. Every individual regardless of his or her race or cultural background, social and occupational status experiences stress in diverse ways (Oyerinde, 2004). Even though life itself is dependent upon a certain level of stress, it is only when stress is mishandled by the body or mind that it becomes associated with adverse health consequences (Olaitan, 2004).

The experience of workplace stress has been subjected to an extensive amount of research. It is now generally recognised that unduly prolonged or intense occupationally related stress can have an adverse impact on an individual's psychological and physical well-being (Health and Safety Executive, 2001; Cooper et al., 2001). Work related stress is now recognized as a global phenomenon (Cox et al., 2007). The stress associated with teaching at a higher educational level such as in the university is wide spread and cross–cultural (Iddah, 2005). Williams 2003, argued in his publication that work related stress and burn out, which are two conceptually related constructs are directly associated with negative effects on mental and physical health of the affected workers. Negative effects of academic stress on psychological well-being have also been widely reported. For example, Blix, Cruise, Mitchell, & Blix, (2004) stated that almost half of their respondents (48%) reported psychological health problems resulting from work related stress and that 84% considered that their productivity and performance had been negatively affected.

Lot of energy is expected and required of an academic worker in a higher institute of education to conduct his daily chores in the classroom coupled with his personal and family commitments (Surinder, 2011). This trend tends to cumulatively subject the individual to a lot of stress. Some authors have also pointed out that one of the possible challenges a university academic worker faces which consequently contributes to work related stress is the task of keeping up with the requirements or demands of work (Al-Hajj, Kahlot, Obeyed & Abu-Talib, 2009). For the average university academic staff, publishing of research work is a strategic enterprise that they must purposefully engage in for them to move upwards along the academic ladder of promotion (Moore, 2003). One popular maxim is 'publish or perish', which means the academic staff worker is expected to contribute to research knowledge through the publishing of high quality research works on a particular schedule (Darnill, 1996; Denning, 1997; Kaplan Educational Centres, 1998; "Teaching Spires," 1996). In addition, another stress contributing work related factor is that the academic staff is faced with the challenge of maintaining quite a heavy teaching schedule for students of various levels which is associated with the task of having to produce accurate and up to date materials for the sometimes inquisitive and querulous

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students (Carr *et. al.,* 2008). At the same time, the academic staff is equally facing the challenges of grading and assessments, setting examination questions and marking scripts, he/she is also expected to give consideration to special needs students through the adaptation of suitable teaching techniques (Bar-Yam *et. al.,* 2002). Apart from these, the university lecturer as a member of the academic structure, might be required to take part in several non-academic assignments such as being part of committees, heading projects, going on assignments, write references for their staff and more (Tytherleigh *et. al.,* 2005). All these work related stress inducing factors will have to be keenly attended to as teaching, research and service to the university can greatly influence their ability to attract some personal benefits such as facilitated promotion, access to and faster approval of grants and more (Macfarlane, 2006).

Generally, psychological variables such as personality traits have been sighted as instrumental to the onset of stress and are also associated with the evaluation of environmental stress, which also determines the level of control one has over workplace stress (Kokkinos, 2007). According to Pervin (1999), "personality represents those characteristics of the person or of the people that generally account for consistent pattern of responses to the situation". It is the total of one's behaviour towards oneself and others as well. Work place related stress is as a result of both the physical and emotional responses of an employee to the unwanted workplace factors which are beyond the abilities of an employee (Cooper *et. al.,* 2008). Work place related stress has been described to have devastating effects on the higher educational institutions in terms of academic staff absenteeism, low performance, lower organizational commitment and turnover intentions (Taris & Van Lersel-Vansilfhout, 2001).

In one large scale study, after extensively reviewing previous researches conducted with literally tens of thousands of participants that examined the relationship between individual's standing on the big five personality dimensions and job performance. Results showed that conscientiousness and neuroticism were both significantly related to job performance across all occupational groups and across all measures of performance. D'Arcy (2007) emphasizes that everyone experiences stress a little differently, it can be a good thing, but overload of it is a different story. He explains that stress overload is caused by the overreaction or failure of the stress response (that is, the individual) to turn off and reset itself properly. As posited by Ofoegbu & Nwadiani (2006), they found out that notwithstanding the fact that the nation had declared the importance of university education, both in national development and the role it plays in satisfying human needs, the case is not different in Nigeria, even as the level of stress among Academics was high. There are growing evidences that no Nigeria university either private or government owned can genuinely claim to be immune from stress (Adebiyi, 2011). University academic workers in Nigeria are also faced with serious work place related stress due to the expanding enrolment of students in universities without a proportional increase in the academic manpower (Obunadike *et. al.,* 2012).

More so, the combination of work and family demands often leads to time pressure and conflict. As a result, a growing number of employees in today's organizations are suffering from burnout. Burnout has severe consequences for the individual at various levels, (like negative psychical-, psychological- and behavioural outcomes), at the family level (including diminished positive affect, increased marital conflicts, and feelings of stress among family members), as well as a negative effect on work outcomes (such as decreased work performance, organizational commitment, as well as increased absenteeism levels). These consequences encompass a severe negative impact on an organization as a whole and not just the individual person. Burnout is a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among workforce (Schaufeli & Buunk, 2003). Burnout is a serious problem in many professions and it has been studied among human service and health professions, doctors, nurses, psychologists, teachers as well as managers (Siying *et. al.,* 2008). Existing research on Burnout has focused mostly on individuals in the helping professions, specifically health services, social services, teaching and childcare. Burnout is typically believed to be most frequently and intensely experienced in these occupations because of the high level of arousal from direct, frequent and intense interactions with clients (Cordes & Dougherty, 1993; Low *et. al.,* 2001).

Regular dealings and close association required at working environment result in organizational burnout (Roper, 1998). An organizational burnout normally takes place in deprived working environment and particularly among academics. The level of dissatisfaction is higher among university level faculty and rate of leaving the job due to burnout is also high in higher educational institutions (Galinsky, Kim & Bond, 2001; Ivancevich & Matteson, 1998; Weisberg, 1994). Though academic field requires a lot interaction with the peers and students, however, different studies found that organizational burnout intensity is generally high in higher educational institutions because of nature of academic workers inclined to work in remoteness and large amount of interaction with the students' effects emotional norms (Weisberg, 1994). Sometimes burnout may also result from improper co-operation of other faculty and staff in academic profession consequential in physiological and physical illness of individual (Galinsky, Kim, & Bond, 2001). Right people for the right jobs help them to overcome burnout because people feel more comfortable and satisfied to work in organizational environments suitable to their capabilities (Tapas & Price, 2001; Tracy, 2000).

Occupational stress is the response by an individual when presented with work demands and pressures that is not equivalent to the individual's knowledge and abilities, which challenges their ability to cope (Leka, Griffiths, & Cox, 2004). Physical strain is a physiological reaction of the stress process, which can be divided into long-term and short-term strain (Frese & Zapf 1999). A long-term strain is a physical illness such as heart disease, which has been suggested as an outcome of stress (Burke, Greenglass & Schwarzer, 1996). Short-term strains are physiological reactions, such as high blood pressure or suppression of the immune responses. Psychological ill health includes anxiety/panic attacks, irritability, difficulty in decision-making, loss of sense of humour, becoming easily angered, constant tiredness, feeling unable to cope, avoiding contact with other people, mood swings and inability to listen to others (Jackson & Rothmann, 2006).

In recent times, academic work in a university has become a stressful occupation (Amina & Raymond, 2014). Although work related stress helps to improve performance up to a limit but then at some point, it starts deteriorating (Winefield & Jarret, 2001). Research has shown that work related stress has a negative impact on the physical and psychological ill health of both academic and support staff (Boyd & Wylie 1994; Barkhuizen & Rothmann (2008); Mahomed & Naudé, 2006). In Nigeria, according to Archibong, Bassey, & Effiom (2010), "the rate at which universities are established by not only the Federal and State governments but also by individuals and religious bodies is a totally welcome development which informs of the acceptance of education as the essential thrust for individual and national development". This nevertheless, has led each university into setting new goal in a bid to defend its existence as capable of having both competent staff and equally capable of producing the much needed professional manpower required by the nation. These then have placed great challenges on the academic staff which may likely cause stress and anxiety, especially if they are dissatisfied in the course of carrying out their duties. As was earlier mentioned by Ikeotuonye (1988), several academic staff in Nigeria tertiary institutions have been observed to report insomnia, fear, hypertension, headaches, depression, adjustment disorders (emotional stress) as result of academic stress. These situations have cause wrong decision making, poor academic performance, lack of commitment and poor construction. According to Nnuro (2012), excessive and otherwise unmanageable demands and pressures can be caused by poor work design, poor management and unsatisfactory working conditions. Stress among academic staff of tertiary institutions is one of the factors that has disrupted smooth operation of academic activities in the tertiary institutions (Ukwayi, Uko, & Udida, 2013).

According to the Canadian Centre for Occupational Health & Safety (2014), thirteen psychosocial risk (PSR) factors for work related stress have been identified by researchers at the Simon Fraser University in Canada based on extensive research and review of empirical data from national and international studies evaluating best practices. The factors were also determined based on existing and emerging Canadian case law and legislation. The 13 organizational factors reflect an evidence-based strategy that helps employers to protect and promote psychological safety and health in their workplace. It also has an impact on organizational health, the health of individual employees and their financial status, including the way work is carried out and the context in which work occurs. These psychosocial risk factors include: Psychological support, Organisational culture, Clear leadership and expectation, Civility and respect, Psychological job fit, Growth and development, Recognition and reward, Involvement and influence, Workload management, Engagement, Balance, Psychological protection and Protection of physical safety.

It is generally believed that some forms of stress are productive (sometimes referred to as "challenge" or "positive" stress) but when stress occurs in amounts that individuals cannot cope with, both mental and physical changes may occur (Canadian Centre for Occupational Health and Safety, 2000). Stress depends not only on extreme condition but also on vulnerability of the individual and the adequacy of his/her coping or defence system (Grimshaw, 1999). Some academic staff have developed personal coping strategies (like relaxation techniques, deep breathing, Massage therapy, progressive relaxation, meditation, social support groups, spending ample time with loved ones, maintain a balanced diet, reduce intake of caffeine, exercise and adequate sleep among others) at their disposal for when stress inevitably occurs (Cahill, Landsbergis, & Schnall, 1995). Therefore, the study examined the psychosocial factors associated with work related stress among academic staff of tertiary educational institution in the study area.

II. METHODOLOGY

This segment presents the data collected and analyzed. Three hundred and twenty (327) respondents were recruited for the study out of which 320 questionnaires was returned; giving about 90% response rate. The analyses were completed for relationships between and among socio-demographic characteristics of the respondents, job stress, personality characteristics, burnout and anxiety among respondents.

Participants

The target population for this study was academic staff members of the Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. As at the time of this study, the institution of study (Obafemi Awolowo University, Ile-Ife, Osun State) had a total of one thousand two hundred (1287) Academic Staff Members.

Sampling Framework

A multistage sampling technique will be adopted in selecting the respondents for the study. The sample size used for this study was computed based on the formula by Araoye (2004):

$$n = \frac{Z^2 P(1-P)}{d^2}$$

From the formula given,

n = sample size

Z = standard normal deviate corresponding of confidence=1.96

P = The Occupational Stress prevalence is 26.2% as used by Akinwumi, Owolabi, OlaOlorun & Ayo, 2012 in Oyo State, South-Western Nigeria.

d = Degree of accuracy = 0.05

Hence, calculated thus:

$$n = \frac{1.96^2 \times 26.2\%(1-26.2\%)}{0.05^2} = \frac{0.7427964096}{0.0025} = 297.11856 \sim 297$$

Attrition rate: (calculate 10% of 297) and add to 297.

10% of 297 = 29.7 ~ 30

Sample size = 297 + 30 = 327 Respondents.

Inclusion and exclusion criteria

Criteria Inclusion

Only academic staff members of OAU who are on the pay role of the University participated.

Exclusion Criteria

Non-academic staff members, Academic staff members who areon leave and Academic staff members who are on sabbatical were excluded.

Ethical consideration

The study protocol will be presented for approval to the Health Research Ethics Committee (HREC) of the Institute of Public Health, Obafemi AwolowoUniversity, Ile-Ife, Osun state, Nigeria. The nature of the study, its aims and objectives will be explained to all participants. Participants will be respected and assured of confidentiality of information supplied in the study.

Procedure

Stage I: In the first stage, all the 13 Faculties from the university will be selected.

Stage II: Next a further 75% of the departments from the university will be randomly selected from each of these faculties.

Stage III: In the final stage, a proportionate sample of respondents will be purposively chosen from each of the selected departments to adequately represent the staff strength of each of the departments in comparison with the other departments.

Research Instruments

The research instruments will include the following:

Socio-demographic data: Age, Gender, Religion, Marital status, Ethnicity, Years of service, and Academic status.

Job Stress Scale (JSS): Job Stress was measured using Theorell's (1988) Job Stress Scale (JSS). It is a 17 - item version of the modified 49 - item scale originally developed by Karasek (1979) to tap employees' perception of job demands, job control, and social support. Job demands (5 items), and job control (6 items) subscales were rated on a 4-point scale (1 = often; 4 = never/almost never). Social support (6 items) was also rated on a 4-point scale (1 = strongly agree; 4 = strongly disagree). Sample items included: "Do you have to work very fast?" (Job demands), "Do you have a choice in deciding HOW you do your work?" (Job control), "My co-worker supports me" (reverse scored) (social support). Theorell (1988) reported Cronbach's alpha coefficient of .79, .87, and .85 for the job demand, job control, and social support subscales, respectively. This scale has been described to have satisfactory psychometric qualities in Nigeria (Bolanle, Anthony, Adepeju & Richard, 2014). A Cronbach's alpha of 0.71 was obtained for the overall scale. High score on the scale implied high job stress and low score meant low job stress.

Big Five Personality 10 item inventory: Personality was measured using the big-five personality inventory (BFI-10) which consist 10 items only. It was developed by Rammstedt & John (2007). The 10 items short version personality inventory measures five (5) dimension of personality which is: Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Each item on the questionnaire is scored using a 5-point rating scale, ranging from Disagree strongly, Disagree a little, Neither agree nor disagree, Agree a little strongly, and to Agree strongly. **Extraversion**: was assessed with items 1R, 6 (R denotes reverse-section); **Agreeableness:** 2, 7R; **Conscientiousness:** 3R, 8; **Neuroticism:** 4R, 9; **Openness:** 5R; 10 (R -item is

reversed-scored; that is items 6-10 is reversed-scored).10 items short version Big five was constructed and comparison was made in USA and Germane. The BFI – 10 has been used in Nigeria (Owolabi & Olajide, 2014). **Zungs Self-Rating Anxiety Scale (SAS):** The **Zung Self-Rating Anxiety Scale** was designed by William W. K. Zung, (1929-1992) a professor of Psychiatry from Duke University, to quantify a patient's level of anxiety. The SAS is a 20-item self-report assessment device built to measure anxiety levels, based on scoring in 4 groups of manifestations: cognitive, autonomic, motor and central nervous system symptoms. Answering the statements a person should indicate how much each statement applies to him or her within a period of one or two weeks prior to taking the test. Each question is scored on a Likert-type scale of 1-4 (based on these replies: " None or a little of the time," "Some of the time," "Good part of the time," " Most or all of the time "). Some questions are negatively worded to avoid the problem of set response. Overall assessment is done by total score. The "Anxiety Index" score can be used on this scale below to determine the clinical interpretation of one's level of anxiety:

- 20-44 Normal Range.
- 45-59 Mild to Moderate Anxiety Levels.
- 60-74 Marked to Severe Anxiety Levels.
- 75-80 Extreme Anxiety Levels.

The scale has been used in Nigeria by Egwuonwu & Olonade (2014) and the Cronbach alpha for this scale was established at 0.76.

Maslach Burnout Inventory: The phenomenon of burnout which is one of the independent variables in the study will be measured with this scale (Maslach et al., 2001. The 22 total items are broken up into three themes with nine (9) items relating to emotional exhaustion, five (5) items relating to depersonalization and eight (8) items to accomplishment. Each item is rated on a frequency and intensity scale. The frequency scale ranges from zero (never) to six (everyday). The intensity scale ranges from one (never) to six (very-strong). The Maslach Burnout Inventory (MBI – 22 item scale) was used to assess 210 nurses working in University of Nsukka health institution for symptoms of burnout and psychological distress in Nigeria (Okwaraji & Aguwa 2014).

Informed Consent
Oral consent was obtained from the selected participants who were resident in Ile-Ife.

Conflict of Resolution
This research was self funded.

III. RESULTS
Socio-demographic and occupational related characteristics of the respondents

This section presents the distribution of respondents' characteristics with regards to their gender, age, religion, marital status, ethnicity, years of service and degree of satisfaction for monthly income. The results indicates that 194 (60.6%) of the respondents belong to the male gender and 126 (39.4%) to the female gender; and based on age group, 82 (25.6%) were 26 – 35 years, 114 (35.6%) were 36 – 45 years, 85 (26.6%) were 46 – 55 years and 39 (12.2%) were 56 years and above. Based on their marital status, 249 (77.8%) were married, 60 (18.8%) indicated that they were single, 4 (1.3%) were divorced, 4 (1.3%) were separated while 3 (0.9%) were single parents. Regarding their ethnicity, 263 (82.2%) belong to the Yoruba ethnic group, 50 (15.6%) were of the Igbo ethnic group while 7 (2.2%) belonged to other ethnic groups. Regarding their years of service, 164 (51.3%) have been serving for 1 – 10 years, 101 (31.6%) have been academic staff for 11 – 20years, 41 (12.8%) for 21 – 30 years while 14 (4.4%) have been engaged as for 31 years and above. The respondents were asked to rate their satisfaction with their monthly income and 13 (4.1%) rated it as poor, 255 (79.7%) rated it as fair while 52 (16.3%) rated it as good.

TABLE 1: SOCIO-DEMOGRAPHIC DETAILS OF THE ACADEMIC STAFF

Variable	Levels	N = 320	%
	Male	194	60.6%
Gender	Female	126	39.4%
	26 - 35 years	82	25.6%
	36 - 45 years	114	35.6%
	46 - 55 years	85	26.6%
Age Group	56 years and above	39	12.2%
Religion	Christianity	240	75.0%
	Islam	78	24.4%
	Traditional	2	0.6%
Marital Status	Married	249	77.8%
	Single	60	18.8%

	Divorced	4	1.3%
	Separated	4	1.3%
	Single Parent	3	0.8%
Ethnicity	Yoruba	263	82.2%
	Igbo	50	15.6%
	Others	7	2.2%
Years Of Service	1 - 10 years	164	51.3%
	11 - 20 years	101	31.5%
	21 - 30 years	41	12.8%
	31 years and above	14	4.4%
Satisfaction	Poor	13	4.1%
	Fair	255	79.6%
	Good	52	16.3%

Distribution of scores on the study measures among the respondents

Result is presented in table 2, which shows that the respondents had mean scores of 10.62 (SD±3.69), 13.05 (SD±4.19), and 10.27 (SD±3.35) in the three sub-scales of the Job Stress Scale i.e. Demands, Control and Support respectively. On Big Five Inventory, they had mean scores of 7.13 (SD±1.46), 5.78 (SD±1.41), 8.08 (SD±1.57), 6.42 (SD±1.38) and 5.92 (SD±1.31) in Openness to experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism sub scales respectively. With regards to the Maslach Burnout Inventory, the results showed that the respondents had mean scores of 11.88 (SD±11.30), 5.60 (SD±6.170 and 13.62 (SD±7.03) on the Emotional exhaustion (EE), Depersonalization (Dep) and Personal accomplishments (PA) sub scales respectively while they had a mean score of 15.94±7.87 on anxiety. Among respondents, the mean score on the Zungs Anxiety Scale was 15.94 (SD±7.87).

TABLE 2: PSYCHOLOGICAL CHARACTERISTICS OF RESPONDENTS

Variables	Mean (S.D.)	Range
JOB STRESS SCALE		
Demands	10.62 (3.69)	5 – 20
Control	13.05 (4.19)	6 – 24
Support	10.27 (3.35)	6 – 21
Big Five Inventory		
Openness		
Conscientiousness	7.13 (1.46)	3 – 10
Extraversion	5.78 (1.41)	2 - 10
Agreeableness	8.08 (1.57)	3 – 10
Neuroticism	6.42 (1.38)	3 – 10
Maslach Burnout Inventory	5.92 (1.31)	2 - 10
Burnout_EE		
Burnout_Dep	11.88 (11.30)	0 – 53
Burnout_PA	5.60 (6.17)	0 – 30
ZUNGS Anxiety Scale	13.62 (7.02)	0 - 37
Total_ZUNGS		
	15.94 (7.87)	3 – 48

Patterns of occupational stress experienced by academic staff (demand subscale of the job stress scale)

The result in table 3 shows with respect to demand sub scale of the Job Stress Scale, (44.7%) of the respondents indicate that they sometimes have to work very fast, (45.0%) have to work intensely, (46.3%) indicated that their work demands too much effort, (41.9%) do not have enough time to do everything and (43.1%) indicated that their work involves conflicting demands.

Table 3: Patterns of Occupational Stress Experienced By Academic Staff (Demand Subscale of the Job Stress Scale)

Demand Subscale	Often N (%)	Sometimes N (%)	Seldom N (%)	Never N (%)
Do you have to work very fast?	104 (31.6)	143 (44.7)	53 (16.6)	23 (7.2)
Do you have to work intensively?	105 (32.8)	144 (45.0)	53 (16.6)	18 (5.6)
Does your work demand too much effort?	85 (26.6)	148 (46.3)	55 (17.2)	32 (10.0)
Do you have enough time to do everything?	73 (22.8)	134 (41.9)	65 (20.3)	48 (15.0)
Does your work often involve conflicting demands?	65 (20.3)	138 (43.1)	74 (23.1)	43 (13.4)

Patterns of occupational stress experienced by academic staff (control subscale of the job stress scale)

Regards to Control Sub scale of the Job Stress Scale, (34.1%) of the respondents indicated that they sometimes have the possibility of learning new things through their work, (39.4%) indicated that their work demands high level of skill and expertise, (49.3%) indicated that their job requires them to take the initiative, (49.1%) indicated that they have to do the same thing over and over again, (51.9%) indicated that they have a choice in deciding how to do their work and (49.1%) also indicated that they have a choice in deciding what you do at work.

Table 4: Patterns of Occupational Stress Experienced By Academic Staff (Control Subscale of the Job Stress Scale)

Control Subscale	Often N (%)	Sometimes N (%)	Seldom N (%)	Never N (%)
Possibility of learning new things at work place?	109 (34.1)	108 (33.8)	82 (29.6)	21 (6.6)
High level of skill or expertise?	96 (30.0)	126 (39.4)	77 (24.1)	21 (6.6)
Does your job require you to take the initiative?	98 (30.6)	132 (41.3)	67 (20.9)	23 (7.2)
Do you have to do the same thing all over again?	46 (14.4)	157 (49.1)	75 (23.4)	42 (13.1)
Choice in deciding HOW you do your work?	57 (17.8)	166 (51.9)	68 (21.3)	29 (9.1)
Choice in deciding WHAT you do at work?	51 (15.9)	157 (49.1)	71 (22.2)	41 (12.8)

Patterns of occupational stress experienced by academic staff (support subscale of the job stress scale)

Regards support to work, most of the respondent indicated that often, there is a calm and pleasant atmosphere where they work (46.3%), (48.1%) indicated that they sometimes get on well with each other where they work, (48.1%) indicated that their co-workers support them, (51.6%) indicated that others understand if they have a bad day, (50.6%) indicated that they get on well with their supervisors and (46.3%) also indicated that they enjoy working with their co-workers.

Table 5: Patterns of Occupational Stress Experienced By Academic Staff (Support Subscale of the Job Stress Scale)

Support Subscale	Often N (%)	Sometimes N (%)	Seldom N (%)	Never N (%)
There is a calm and pleasant atmosphere to work	148 (46.3)	142 (44.4)	22 (6.9)	8 (2.5)
We get on well with each other where I work	130 (40.6)	154 (48.1)	34 (10.6)	2 (0.6)
My co-workers support me	129 (40.3)	154 (48.1)	28 (8.8)	9 (2.8)
The others understand if I have a bad day	101 (31.6)	165 (51.6)	44 (13.8)	10 (3.1)
I get on well with my supervisors	162 (50.6)	127 (39.7)	25 (7.8)	6 (1.9)
I enjoy working with my co-workers	148 (46.3)	138 (43.1)	27 (8.4)	7 (2.2)

Level of occupational stress among staff of OAU according to job stress scale subdomains

Table 6 presents an examination of the sub-domains of Job Stress Scale among the respondents. The result shows that 182 (56.9%) of the respondents had low level in the demand subscale while 138 (43.1%) of the respondents had high level. This was determined through the mean score of 10.62 (SD±3.67) for the Demand

sub-domain. Respondents whose scores are above 10.63, are categorized as high on job demand and those whose scores are below 10.61 are categorized as low on job demands.

Also, 192 (60.0%) of the respondents had low level control in job stress while 128 (40.0%) of the respondents had high level control. This was determined through the mean score of 13.05 (SD±4.19) for the Control sub-domain. Respondents whose scores are above 13.06, are categorized as high on job demand and those whose scores are below 13.04 are categorized as low on job demands.

With regards to support, 167 (52.2%) of the responded had low level support while 153 (47.8%) of the respondents had high support in job stress. This was determined through the mean score of 10.27 (SD±3.35) for the Control sub-domain. Respondents whose scores are above 10.28, are categorized as high on job demand and those whose scores are below 10.26 are categorized as low on job demands.

Table 6: Level of Occupational Stress among Staff of OAU According to Job Stress Scale Subdomains

Variables	Level N (%)	Mean (SD)
Demand		
Low	182 (56.9)	10.62 (3.67)
High	138 (43.1)	
Control		
Low	192 (60.0)	13.05 (4.19)
High	128 (40.0)	
Support		
Low	167 (52.2)	10.27 (3.35)
High	153 (47.8)	

Prevalence rates of study variables

Table 7 shows the mean differences in the academic staff with high and low scores in relation to the study measures and their subscales.

For Occupational Stress: Those with high scores (24.7%) on the JSS-Total had a significantly higher ($p<0.001$; t = -23.896) with mean score (12.78 / SD 2.31) compared to those with low mean score (8.93 / SD 2.18). For the dimensions of JSS, the study further revealed that, those with high scores (20.0%) on workplace demand (JSS_Demand) had a significantly higher ($p<0.00$; t = -15.59) with mean score (46.70 / SD 5.02) compared to those with low mean score (30.75 / SD 5.90). It further showed that, those with high scores (22.2%) on control over workplace stress (JSS_Control) had a significantly higher ($p<0.00$; t = -24.702) with mean score (19.41 / SD 2.29) compared to those with low mean score (11.24 / SD 2.50). Also, those with high scores (15.9%) on support from workplace (JSS_Control) had a significantly higher ($p<0.00$; t = -20.001) with a mean score (16.00 / SD 2.21) compared to those with a low mean score (9.18 / SD 2.24).

For Anxiety: The study revealed that those with high scores (12.8%) on anxiety (Zungs) had a significantly higher ($p<0.00$; t = -13.30) with a mean score (43.56 / SD 3.24) compared to those with a low mean score (15.14 / SD 6.38).

For Burnout: Those with high scores (17.2%) on the MBI-Total had a significantly higher ($p<0.001$; t = -21.839) with mean score (65.22 / SD 10.23) compared to those with low mean score (24.02 / SD 13.18). For the dimensions of MBI, the study further revealed that, those with high scores (21.6%) on emotional exhaustion had a significantly higher ($p<0.00$; t = -24.825) with mean score (29.34 / SD 7.19) compared to those with low mean score (7.08 / SD 6.43). It further revealed that, those with high scores (21.2%) on depersonalization had a significantly higher ($p<0.00$; t = -26.337) with mean score (15.43 / SD 4.00) compared to those with low mean score (2.95 / SD 3.31) and on personal achievement, those with high scores (20.6%) had a significantly higher ($p<0.00$; t = -25.688) with mean score (24.92 / SD 4.40) compared to those with low mean score (10.68 / SD 3.91).

TABLE 7: PREVALENCE RATES OF STUDY VARIABLES

Variables	N (%)	Mean (SD)	t – Value	P – Value
JSS_Total				
Low	241 (75.3)	8.93 (2.18)	- 23.896	< 0.001
High	79 (24.7)	15.78 (2.31)	-	
JSS_Demand				
Low	256 (80.0)	30.75 (5.90)	- 15.95	< 0.001
High	64 (20.0)	46.70 (5.02)	-	
JSS_Control				
Low	249 (77.8)	11.24 (2.50)	- 24.702	< 0.001

High	71	(22.2)	19.41	(2.29)	-		
JSS_Support							
Low	269	(84.1)	9.18	(2.24)	-	20.001	< 0.001
High	51	(15.9)	16.00	(2.21)	-		
Zungs_Total							
Low	279	(87.2)	15.14	(6.38)	-	13.30	< 0.001
High	41	(12.8)	43.56	(3.24)	-		
Burnout_Total							
Low	265	(82.8)	24.02	(13.18)	-	21.839	< 0.001
High	55	(17.2)	65.22	(10.23)	-		
Burnout_Emotional Exhaustion							
Low	251	(78.4)	7.08	(6.43)	-	24.825	
High	69	(21.6)	24.34	(7.19)	-		< 0.001
Burnout_Depersonalis ation	252	(78.8)	2.95	(3.31)	-	26.337	< 0.001
Low	68	(21.2)	15.43	(4.00)	-		
High							
Burnout_Personal Achievement							
Low	254	(79.4)	10.68	(3.91)	-	25.688	
High	66	(20.6)	24.92	(4.40)	-		< 0.001

Relationship between the Job Stress Scale subdomains and the academic staff sociodemographic variables

Table 8 shows the relationship between Job Stress Scale subdomains and the academic staff sociodemographic variables. The result shows that there was a significant relationship between job demands and job control ($r = 0.702$; $p < 0.05$) and job support ($r = 0.182$; $p < 0.05$). Job control significantly correlated with job support ($r = 0.176$; $p < 0.05$). The job stress factors did not correlate significantly with chronological age, but has a significant relationship with years of service ($r = 0.901$; $p < 0.05$).

Table 8: Relationship between Job Stress Scale Subdomains and the Academic Staff Sociodemographic Variables

	1	2	3	4	5
JSSDemands	1				
JSSControl	**0.702****	1			
JSSSupport	**0.182****	**0.176****	1		
Age	-0.053	0.028	-0.010	1	
Years of Service	-0.002	0.046	-0.024	**0.901****	1

**. Correlation is significant at the 0.01 level (2-tailed).

Relationship between the Job Stress Scale subdomains and Maslach Burnout Inventory subdomains

Table 9 shows the relationship between Job Stress Scale subscales and Masclach Burnout Inventory subscales. The result shows that there was a significant relationship between the JSS demand subscales and the MBI emotional exhaustion subscale ($r = 0.184$; $p < 0.05$), depersonalization scale ($r = 0.206$; $p < 0.05$) and personal accomplishment scale ($r = 0.137$; $p < 0.05$). Also, there was a positive relationship between job support and emotional exhaustion ($r = 0.308$; $p < 0.05$), depersonalization ($r = 0.276$; $p < 0.05$) and personal accomplishment ($r = 0.181$; $p < 0.05$). All relationships were positive indicating that high scores in job demands or job support implies high emotional exhaustion, depersonalization or personal accomplishment.

Table 9: Relationship between Job Stress Scale Subscales and Maslach Burnout Inventory Subscale

		1	2	3	4	5	6
1	JSSDemands	1					
2	JSSControl	**0.702****	1				
3	JSSSupport	**0.182****	**0.176****	1			

4	Burnout_EE	**0.184****	-0.007	**0.308****	1		
5	Burnout_Dep	**0.206****	0.095	**0.276****	**0.570****	1	
6	Burnout_PA	**0.137***	0.031	**0.181****	**0.432****	**0.472****	1

**. Correlation is significant at the 0.01 level (2-tailed).

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

Relationship between job stress scale subscales and big five inventory subscales

Table 10 shows the relationship between Job Stress Scale subdomain and big five inventory (personality traits) subdomain. The result shows that while openness to experience, conscientiousness and agreeableness are positively related to job stress demand, extraversion and neuroticism are indirectly related to job stress demand; all of which shows a low correlation. However, while conscientiousness shows a significant relationship ($r = 0.129$; $p < 0.05$), openness to experience showed significant relationship ($r = 0.179$; $p < 0.01$).

For control domain, result shows that all personality traits are negatively related to Job Stress Control of which, they showed low correlation.

As for the Support domain, result shows that all personality traits are positively related to Job Stress Support. However, while conscientiousness and extraversion shows a moderately significant related ($r = 0.366$; $p < 0.001$) and ($r = 0.334$; $p < 0.001$) respectively, agreeableness and neuroticism showed a low significant relationship ($r = 0.185$; $p < 0.001$) and ($r = 0.243$; $p < 0.001$) respectively.

TABLE 10: RELATIONSHIP BETWEEN JOB STRESS SCALE AND BIG FIVE INVENTORY SUB

		1	2	3	4	5	6	7	8
1	JSSDemands	1							
2	JSSControl	**0.702****	1						
3	JSSSupport	**0.182****	**0.176****	1					
4	BFI_Openess	**0.179****	**-0.002**	.009	1				
5	BFI_Conscientiousness	**0-.129***	**-0.146****	**0.366****	**0.152****	1			
6	BFI_Extraversion	-0.096	-0.077	**-0.334****	**0.287****	**-0.125***	1		
7	BFI_Aggreableness	0.015	**-0.127***	**0.185****	0.073	**.0363****	**0.135***	1	
8	BFI_Neuroticism	-0.070	**-0.168****	**0.243****	**0.144***	**0.409****	0.031	**0.356****	1

**. Correlation is significant at the 0.01 level (2-tailed).

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

IV. DISCUSSION OF FINDINGS

The findings from the study showed that the number of male respondents ($n = 194$) in this study was higher when compared with the female respondents ($n = 126$). This implies that there are more male academic staff than female academic staff in Obafemi Awolowo University, Ile-Ife, Osun State, South-Western Nigeria. This could be that, at some point women have somewhat experienced gender opportunity restrictions and ceiling across societies down the ages. The age range of respondents in this study are well distributed with the highest range of age between 26 and 65 years of age (mean age and standard deviation as 42.80 ± 9.8 respectively) which gives us an idea of the age group (36-45 years, [35.6%]) with the highest population at Obafemi Awolowo University, Ile-Ife, Osun State. This is similar to the findings of Philip, Richard &Andy, 2016, which shows the minimum age of participants was 24 and the maximum was 78 (Mean: 47.99; SD: 10.32). The Majority of the respondents were from the Yoruba ethnicity (82.2%) which gives us a view of the largest ethnic group represented at Obafemi Awolowo University, Ile-Ife, Osun State. The largest religion represented by the respondents in the study was Christianity (75.0%). Also, 77.8% of the respondents are married. Furthermore, 79.6% of the respondents reported that the degree of satisfaction with their income as been fair. For years of service to the institutions, 51.3% of the respondents reported that they had served in the system within 1 – 10 years; with 11.73 ± 8.6 as mean age and standard deviation respectively, within the age range of 1-36 years. However the average age of 42.80 ± 9.8 was higher than those in the Adebiyi 2013 study which was 27.04 ± 6.77. According to Engle in 2012 also noted the importance of age-based differences, and conventionally believe that stress universally declines with chronological age.

Job Stress Scale (JSS) was measured in three dimensions: Demands, Control and Support results. JSS_Command had the highest mean scores of 13.05 (SD±4.19), followed by JSS_Demand with a mean score and standard deviation of 10.62 and 3.69 respectively. JSS_Support had the lowest mean score 10.27 and a standard deviation of 3.35. The JSS_Total has a mean score of 33.99 and a standard deviation of 8.58.

In terms of personality traits in this study, Extraversion had the highest mean score of 8.08 and standard deviation of 1.57. Extraversion is marked by positive feelings, pronounced engagement with the external world. They tend to be enthusiastic, sociable, energetic, optimistic and action oriented. They possess high group visibility, like people, like to talk, assert themselves and enjoy excitement and stimulation (Costa & McCrae, 2002). In this study, Extraversion had a weak statistically significant positive correlation with the demand and control domains of the Job Stress Scale but have a moderately strong statistical significant positive correlation with the support domain of Job Stress Scale.

Openness to experience comes next in terms of mean score of 7.13 and standard deviation of 1.46. People who are open to experience are intellectually curious, open to emotion, imaginative, sensitive to beauty, appreciative of heart and willing to try new things. They tend to be, when compared to closed people, more creative and more aware of their feelings (John & Srivastava, 1999). In this study, Openness to experience had weak negative correlations with workplace stress.

Agreeableness comes next with mean score of 6.42 and standard deviation of 1.38. People who score high on Agreeableness value getting along with others. They are generally considerate, kind, caring, generous, compliance, trusting and trustworthy, helpful, prosocial and willing to compromise their interests with others (Rothmann, et al, 2003). They also have an optimistic view of nature, with the desire to help others; in return, they expect others to be helpful. In this study, Agreeableness had a weak statistically significant positive correlation with workplace stress.

Neuroticism had the second lowest mean score 5.92 and standard deviation of 1.31. Neuroticism measures the continuum between emotional adjustment or stability and emotionally adjustment on neuroticism (Costa & McCrae, 2002). This means that those who score high in neuroticism are nervous, always fearful, sad, tension, anger, guilt, emotionally reactive and vulnerable to stress. They are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly difficult. Their negative emotional reactions tend to persist for unusually long periods of time, which means they are often in a bad mood. Those who are at the low end of neuroticism, are emotionally stable and even-tempered. In this study, Neuroticism had a weak positive correlation with workplace stress. Neuroticism includes characteristics such as anxiety, pessimism, high sensitivity in interpersonal communication, physical symptoms, and a wide range of unpleasant and negative thoughts and feelings. Therefore, a person who displays negative emotions is often worried and tense, is prone to feelings of guilt and shame and rejection, is extremely sensitive to criticism, and often feels ineffective. Thus they are more likely to develop higher stress than persons who score low on a scale of neuroticism.

Conscientiousness had the lowest mean score of 5.78 and standard deviation of 1.41. High scores on conscientiousness indicate a preference for planned rather than spontaneous behaviour (Costa & McCrae, 2012). They are purposeful and determined, show self-discipline and aim for achievement against a measure of outside expectation. In this study, Conscientiousness had moderate positive correlations with workplace stress.

Maslach Burnout Inventory (MBI) was measured in three dimensions: Emotional exhaustion, Depersonalization and Accomplishment. The results showed that Personal accomplishments (PA) had the highest mean score of 13.62 and a standard deviation of 7.03. In contrast to the other two subscales, lower mean scores on the subscale correspond to higher degrees of experienced burnout (Maslach, 1982). The second highest was depersonalization, with a mean score of 13.62 and standard deviation of 7.03. They are described by an unfeeling and impersonal responds towards recipients of one's care or service. Emotional exhaustion had the lowest mean score of 11.88 and standard deviation of 11.30. These persons are characterised by feelings of being emotionally overextended and exhausted by their work. For both emotional exhaustion and depersonalization subscales, higher mean scores corresponds to higher degree of experienced burnout.

On the Zungs Anxiety Scale, there was a mean score of 15.94 (SD±7.87). This implies that the higher scores in any of the dimensions of workplace stress, can lead to higher anxiety among the respondents (Zung, 1980).

Findings in regards demands of workplace stress, 143 (44.7%) of the respondents reported that they sometimes have to work faster than expected, in order to meet up with time. Among the respondents in this study, 144 (45.0%) of the participants reported to work intensely, while 148 (46.3%) of the respondents indicated that their work demands too much effort. Also, 134 (41.9%) of the respondents reported that they do not have enough time to do everything while the remaining 138 (43.1%) mentioned that their work demands conflicting demands.

Regards control over workplace stress, 109 (34.1%) of the respondents reported that they often have the possibility to learn something new in course of their job, 126 (39.4%) of the respondents reported that sometimes, their work requires a high level of expertise. Although, 132 (41.3%) of the respondents also reported that sometimes their work requires them to take the initiative, but 157 (49.1%) of the respondents reported that they sometimes have to do the same thing over and over again. More so, 166 (51.9%) of the respondents mentioned that they sometimes have choice to decide how to go about their work and 157 (49.1%) reported that they sometimes on what to do at work.

According to participants in this study, the kind of support they get the job, either from Co-Worker or from in their job is fair. 148 (46.3%) of the respondents mentioned that they often have a calm and pleasant atmosphere where they work and 154 (48.1%) of the respondents mentioned that they often go on well with each other where they work. 154 (48.1%) of the respondents also mentioned that they sometimes get support from co-workers and 165 (51.6%) reported that their co-workers sometimes understand when they have a bad day. More so, 162 (50.6%) of the respondents reported that they often get on well with their supervisors and 148 (46.3%) reported that they often enjoy working with co-workers.

A cut-off score of 10 .63 was used to determine the level of JSS_Demand. In this study, all those who scores above the cut off mark are high on workplace demand, while those who score lower than the cut off, are low in workplace demand.

Same is applicable for the JSS_Control but this time with a cut off of 13.06. All those who score above the cut off for control are high on their control of workplace stress, while those who score lower than the cut off are low on their control of workplace stress.

In the same manner, those who score above 10.28 on JSSS_Support have a higher workplace support than those who score lower than the cut off; who are invariably low on workplace support.

V. CONCLUSION AND RECOMMENDATIONS

The study assessed the psychosocial factors associated with work related stress among academic workers of Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. The study showed that there are joint statistically significant influences of the independent variables on workplace stress. Therefore, the results of the analysis showed that: There is significant relationship between Personality Traits and workplace stress; burnout and workplace stress; anxiety symptoms and workplace stress; and some selected socio-demographic variables (years of service to the university and age) and workplace stress. The study however concluded that, there is significant association between Personality Traits, burnout, anxiety and workplace stress. As a result of the findings, the following policies are appropriate and recommended:

1. Universities among other institutions, should provide the highest training grounds for the requisite human capital for national development. If Nigeria is to achieve her developmental goals therefore, she needs to adopt practices that may help to alleviate stress among university lecturers. It is encouraged that the university executives should ensure that lecturers go on annual leave as at when due instead of engaging them in extra part time teaching programmes to generate funds for the institutions. Recreation facilities and social support packages should be boosted up in the university environments.

2. Functional, well equipped counseling centers should be established in all Nigeria Universities in the South-West. Here, competent counselors can offer professional services which may alleviate the level of perceived stress. According to Manson (2007) before a situation can be regarded as stressful, the individuals' perception of that situation must be taken into account that is, appraisal underlie the actual experience of stress. Though the counsellors may not be able to change the external environment of the lecturers, they may be able to change their internal environments (attitudes to situations). This may be achieved through counseling strategies focused on cognitive restructuring and behaviour modifications therapies.

3. The Government on their part should look into the inadequate and deteriorating infrastructures. The collapsed municipal services (water, sewage, electric power and waste disposal among others) should be addressed with all urgency.

4. In Nigeria, higher education institutions no longer provide the low stress working environments that they once did. In fact, academics throughout the world deal with a substantial amount of ongoing occupational stress (Kinman 2001).