

THE INFLUENCE OF WORKERS' PERSONALITY AND GENDER ON OCCUPATIONAL STRESS IN AKWA IBOM STATE MINISTRIES OF FINANCE AND WORKS, UYO, NIGERIA

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ABSTRACT

This survey aimed at investigating the degree of susceptibility of workers from two personality poles (extraversion/introversion) and gender to occupational stress. Data were collected from one hundred and ninety civil servants (hundred males and ninety females) between the age range of 18 - 35 years in the Akwa Ibom State ministries of works and finance, Uyo. Eysenck Personality Questionnaire (EPQ) and Job-related Tension Scale (JTS) were used to determine the personality dimensions and to measure the occupational stress of workers respectively. A 2 x 2 factorial design was instrumental in data collection while Analysis of Variance and F-test statistical tools were adopted for data analysis. The two hypotheses formulated for the study were rejected. This revealed that there is a significant difference between extraverted and introverted workers response to occupational stress as there is a significant difference between male and female workers response to occupational stress. Based on the results of the study, it was advanced that stress management strategies aimed at ensuring employee performance and organizational effectiveness should take personality and gender differences into consideration.

Keywords: *Occupational stress, Extraversion, Gender, Stressors, Introversion*

INTRODUCTION

In his quest to satisfy numerous aspects of needs (basic, security, belongingness, self-esteem and self-actualization), man is involved in one form of occupational activity or the other. The complexities inherent in economic, social, religious and educational engagements, triggered by the gap existing between human expectations and attainments, do buffer the pressure or stress to keep at par with the resultant deficiencies. In the words of Selye (1976), stress - which presents itself in three stages of alarm, resistance and exhaustion - assaults people the world over. In fact, over the years, stress has made a progressive incursion into the world of men at work (Keikolt, 2010). Little wonder why recent research evidence implicates stress

in employees' performance and well-being as it has also been found to have important relationships with organizational effectiveness and productivity (Steven and Maryann, 2002; Passer and Smith, 2003). Occupational stress has been variedly conceptualized not only to reflect researchers' theoretical positions, but also their practical observations. Some have used the term to describe the environmental characteristics thought to affect people adversely at work (Kahn, Wolfe, Quinn, Snoek and Rosenthal, 1984), while others posit that it is a general bodily response to any demand at work (McGrath, 1986). In the same vein, Caplan, Cobb, French, Van and Pinneau (1984) captures the meaning of occupational stress as any characteristics of the job environment which poses a threat to the individual. The preceding definitions explicate the theory of person - environment, which recognizes two kinds of feat: the extent to which a person's skills and abilities match the demands and requirements of the job and the extent to which the person's needs (resources) are supplied in the job environment. Hence, occupational stress could generally be conceptualized as a misfit of either of these relationships between employees and job environment (Nelson, Quick and Simmons, 2001).

Steven and Maryann (2002) identify three major sources of stress in organizations: Work related stressors, non-work related stressors and role related stressors. Work related stressors can be physical or environmental. Physical stressors such as excessive noise, poor lighting, safety hazards, poor ventilation, lack of privacy etc, are found in the physical work environment. Environmental fluctuations such as political uncertainties experienced in events of political threats and changes and technological uncertainties witnessed in times of new innovations wherein the skills and experiences of an employee are rendered obsolete are common examples of environmentally triggered work related stressors. Away from these, there are non-work related stressors such as relationship problems, financial difficulties, loss of loved ones, birth of a child and mortgages. These are worth mentioning because workers do not park them at the door when entering the work place. They carry them over and ultimately, these affect their behaviour at work.

The third source of stress in organizations - role related stressors include conditions where employees have difficulties understanding, reconciling or performing assigned roles in the work environment. Four role related stressors are identified: role conflict, role ambiguity, work load and task characteristics (Michael, 1992). Researchers have consistently placed the explanation of occupational stress in the psychological domain (Shaw, 2000; Passer and Smith, 2003; Kiekolt, 2010). One psychological variable implicated in the area of stress is personality characteristics (an independent variable of interest in this study) (Miller, 2002). Personality characteristics are those inner psychological characteristics that both determine and reflect how a person responds to his/her environment (Schiffman and Kanuk, 1987). The inner characteristics are those specific qualities, attributes, traits, factors and mannerisms that distinguish one individual from another. Those inner characteristics that constitute an individual's personality are a unique combination

of factors, thus many individuals are described as extraverts, while others are introverts (Wayne, 1999). Accordingly, Thorne (2001) observes that an extraverted person is active, optimistic, social and outgoing whereas introverts are quiet, unsociable, passive and careful. Why are some workers active, social, happy and easy going and others, withdrawn and critical, given the same work environment? The authors suspect that the solution to this puzzle lies in the critical examination of the determinants of human personality - the forces of nature and nurture. Nature refers to those factors that are determined at conception: physical stature, gender, muscle composition, energy level, biological rhythms and other characteristics that are generally considered either completely or substantially influenced by who one's parents are (Santrock, 2003). Proponents of this school of thought argue that the ultimate explanation of an individual's personality is in the molecular structure of the genes located in the chromosomes. Nurture, on the other hand, refers to the experiences people have as children and in the course of growth.

Those factors such as strictness or permissiveness of a child's parents, the number and position of children in the family, the extent to which parents and/or teachers demand from the child, success or lack thereof in making friends or getting and keeping a job, the culture in which a person was raised or live as an adult and peer group influence are environmental modifiers of personality generally termed as nurture. In this direction, personality characteristics, which could be genetically or environmentally triggered, are suspected to impact on career choice, stress and major aspects of job performance as it probably accounts for workers development of adaptive or maladaptive coping strategy in organizations (Laney, 2002). Gentile (1993) perceives gender, (another independent variable of interest in this study), as the psychological experience of one's sex. Men and women differ within their biological make-up and in the ways they are treated as well as the ways they response to events and situations. Similarly, in Wayne's (1999) opinion, gender refers to the culturally constructed dimension between femininity and masculinity, while Eagly & Wood (1999) pitch their tent on the bio-social model, emphasizing on the differences between men and women, with men built larger, stronger and faster; women built and equipped for child bearing and nursing. From the foregoing, gender could generally be conceived as the biological, social, psychological and cultural divisions into which man is classified.

Stress at work impacts far reaching consequences on the individual worker, the organization and the society at large. In the words of Taylor (2003), people living in stress conditions are likely to take to smoking and/or drinking, experience loss of appetite and avoid exercise. These stress - related behaviours are linked with physiological disorders such as cardiovascular diseases, cancer, the destruction and breakdown of immune system, high blood pressure and early death as they are more likely to be exposed to the psychological hazards of tension, anxiety, irritability, boredom, procrastination and accident (Schneiderman, 2001; Kiekolt, 2010). The resultants of the aforementioned psychological and physiological disorders on job

satisfaction, organizational effectiveness and national development are better imagined. It is observable that while researchers and stakeholders in the developed countries have made concerted efforts to tackle the problem of occupational stress, the scenario in the developing world, especially in Nigeria, has been that of indifference, a situation that is capable of causing devastation of huge proportion if left unaddressed. Thus, if this work would add to the scanty literature on occupational stress in Nigeria, with the import of redirecting stakeholders' interest and attention to the hitherto neglected malady that has permeated the world of men at work, thus setting the pace for designing a framework to cushion its incidence on the labour force, the researchers would have filled a vacuum existing in an important area of research. Against this backdrop, this study sets to proffer solutions through scientific procedure to the following research questions:

- i. How does personality characteristic influence workers' response to occupational stress?
- ii. Is gender a factor in workers' response to occupational stress?

This study is tailored to explore the influence of some psychological variables on occupational stress. However, in specific term, its purpose is to:

- i. Establish if personality characteristics would exert any influence on workers' response to occupational stress.
- ii. Find out if the gender of workers would influence their response to occupational stress

Emerging Psychological literature on the subjects seems to be consensual and there appears to be increasing evidence that Introverts view themselves as having control over their outcomes, thus demanding situations would stimulate higher level of performance. Extraverts, on the other hand respond to their circumstances with psychological distress, they are easily irritated at delays, just as they have an unnecessary sense of time urgency (Shaw, 2000; Steptoe, 2000; Passer and Smith, 2003). Both men and women are engaged in occupation and are both subject to work stress experience. According to Wayne (1999), women are more likely than men to experience lasting reactions to traumatic events. This implies that they are more likely than men to experience anxiety, depression and disturbances in their sleep pattern (Bruch and Check, 1995; Nolen-Hoeksema, 2001). From the foregoing, it becomes pertinent to hypothesize that:

- i. There is no significant difference between extraverted and introverted workers response to occupational stress.
- ii. There is no significant difference between male and female workers response to occupational stress.

METHODOLOGY

One hundred and ninety workers, made up of one hundred males and ninety females were randomly selected from the civil servants of Akwa Ibom State ministries of Finance and Works respectively, Uyo, Nigeria. This sample was characterized by

an age range of 18 - 35 and a mean age of 27.24. Eysenck Personality Questionnaire (EPQ) and Job-related Tension Scale (JTS) were instrumental in data collection. Jegede (1980) provided the alpha coefficient reliability of EPQ for Nigerian male sample to be 0.60 and 0.68 for female sample. A coefficient of divergent validity between EPQ and Progressive Matrices Intelligence was also provided to be 0.60 (Jegede, 1980). This position was later confirmed by Idemudia (1997), who obtained a split-half reliability of 0.79 and an internal consistency of 0.89. Job-related Tension Scale (JTS), according to Osaghare (1988) has a reliability coefficient of 0.87 and a validity value of 0.46. The aforementioned psychometric properties place both instruments in a reliable and valid status for this study.

EPQ assumes a forced - choice response format of 'yes' and 'no'. This twenty one item questionnaire, which is positively worded, measures the extraversion/introversion dimensions of human personality. Thus, 'yes' responses attract one point each, while each 'no' response attract zero point. The sum of the scores therefore represents a respondent's personality score of either introversion or extroversion. EPQ has baselines of 13.32 for male and 14.48 for female subjects. Therefore scores equal to or greater than these baselines represent extraversion while lower scores indicate introversion.

The Job-related Tension Scale (JTS) is structured in a Five-Point Likert format of Never (1), Rarely (2), Sometimes (3), Rather often (4) and Nearly all the times (5). The items are positively worded, thus there are directly scored. The sum is obtained from the marked options of the subjects. The sum of the marked items is then divided by fifteen (the number of test items) to obtain a worker's mean score. Norms for JTS are 2.84 and 2.81 for male and female respondents respectively. Informed consents of respondents were sought for and obtained through higher personnel in the ministries. On the date of questionnaire administration, respondents were made to collect and fill the questionnaire as they reported for duty in the morning hours. About half of the respondents of the ministry however declined participating in the study, based on lack of time to respond to the numerous items in the questionnaire. The researchers (after about thirty minutes) went from office to office to retrieve the completed questionnaire.

Thus, of the two hundred and sixty questionnaires administered, thirteen were wrongly filled, twenty-seven were not retrieved as these respondents were not found on seat during retrieval, while thirty of those retrieved were above the age range of interest. One hundred and ninety questionnaires were therefore left for data analysis. The independent variables of interest in this study are personality characteristics and Gender. Personality is dichotomized into two treatment conditions; extraversion and introversion. Gender is also classified into two levels; male and female. Occupational stress is the dependent variable. The above categorization triggered the impetus to adopt a 2×2 factorial design for this study. A two-way Analysis of Variance for unequal sample sizes (2-way ANOVA) was adopted for analysis. F-test was also employed in hypotheses testing.

RESULTS AND DISCUSSION

Table 1: Table of Means (X) and standard Deviation (SD) for Personality characteristics (factor A) and Gender (factor B) on Occupational stress

Gender	Personality Characteristics		
	Extraversion (a1)	Introversion (a2)	X sum
Male (b1)	X = 15.96	X = 9.69	25.65
	SD = 145.00	SD = 95.46	
	n = 48.00	n = 52.00	
Female (b2)	X = 16.39	X = 11.48	27.87
	SD = 54.36	SD = 120.98	
	n = 46.00	n = 44.00	
X sum	32.35	21.17	53.52

Source: Survey 2008

Table 2: Summary Table of 2-way Analysis of Variance for Personality characteristics (factor A) and Gender (factor B) on Occupational stress

SON	Ss	DF	Ms	F-test	P
A	1470.63	1	1470.63	656.63	<.05
B	57.88	1	57.88	25.84	<.05
AB	21.65	1	21.65	9.67	<.05
S/AB	416.98	186	2.24		
SUM	1967.14	189			

Source: Survey 2008

Note: Critical value for factors A, B, AB = 3.84 at .05 confidence level.

Results on table 1 indicate that extraverted workers (a1) recorded a higher mean score on occupational stress than introverted workers (a2). In the same vein, female workers (b2) had a higher mean score on occupational stress than their male counterpart. Results on table 2 indicate a statistically significant difference between extraverted and introverted workers response to occupational stress. It is also evident that there exists a significant difference in the response of male and female workers to occupational stress. The results also reveal a significant joint influence of personality characteristics and gender on worker's response to occupational stress. Based on the foregoing; the hypotheses which predicted no significant difference between extraverted and introverted workers response to occupational stress; and male and female workers response to occupational stress were rejected.

The results corroborate the findings of Shaw (2000), Chang (1998), Passer and Smith (2003) who independently found a positive relationship between extraversion and occupational stress. In Nigeria, like in other third world countries of the world, stress emanates from a variety of sources: workers personal life, the attitude of the public towards the nature of work one finds oneself and the organizational factors. It is pertinent to observe that among myriads of personality factors, introversion seems to have strongest links to mental health, physical health and longevity. This position was confirmed in a study where a large group of children were followed for over seventy years. Children who were judged by their parents and teachers to be highly introverted at age eleven lived significantly longer and were about thirty percent less likely to experience stressful situations or death in

any given year (Friedman and Rosenman, 1995; McGuire, 1999). Introverts were conscientious at work and were less likely to engage in risky behaviours such as absenteeism, lateness, fighting in workplace, more likely to plan ahead of time and therefore were less likely to experience stress at work. They were also less likely to smoke, drink to excess and more likely to exercise regularly, follow medical prescription when ill. They viewed themselves as having control over their outcomes. Finally, they appraised opportunities rather than threats (Thorne, 2001). As a result, demanding situations not only became less stressful, but they could actually stimulate higher level of performance (Friedman and Rosenman, 1995; McGuire, 1999).

The picture of introverts painted above is in sharp contrast with that of the extraverts who although are active, optimistic, social, outgoing, do have exaggerated sense of time urgency and become very irritable at delays (Chang, 1998). They are characterized by high level of competitiveness; they are ambitious as well as aggressive and hostile when things get in their way (Shaw, 2000). In attempting an explanation of the result of the of this study, the researchers preferred theoretical thrust is Gordon Allport's Trait model, which holds that personality consists of broad dispositions, called traits that tend to lead to characteristic responses. Traits are the propensities to behave in a consistent, distinctive and unique style (Morgan, King and Robinson, 1996). They are generalized and focalized neuropsychic system (particular to the individual) with the capacity of rendering many stimuli functionally equivalent and to initiate and guide consistent (equivalent) forms of adaptive and expressive behaviours. Thus, when we describe people, we generally pick out some distinctive characteristics by which we can identify them; they are friendly, hostile, suspicious, funny and honest. These descriptions attempt to make sense of our observation of people's disposition in a variety of situations. They also predict how the same people will act when confronted with similar circumstances. Allport's position however pays less attention to the factors that underlie the traits of the extraverts who are more susceptible to stress.

According to the proponents of this model, the reason extraverts respond adversely to stress situations is due to their psychological make up. Thus they are described as 'immature', impulse - ridden, chronically aggressive' highly frustrated and 'untrusting people' (Morgan, King and Robinson, 1996). The second null hypothesis, which was also rejected, is consistent with the common position of Nolen - Hoekema (2001), Wayne (1999), Bruch and Check (1995). They found organizational women to experience greater level of exposure to stress than men; the stressors, which mediate mood disorders often experienced by women. The aforementioned empirical position might not be unconnected with the fact that greater number of women is entering the labour force and this has taken up on the stress of filling the dual role of wage earners and home makers. Besides, women have more need for affiliation; intimacy and social support. A defect and/or deficiency in these present a source of danger to them. Lastly most women, when confronted with distress adopt emotional-focused coping strategy in their response, whereas men are pushed

to be more independent, assertive, self sufficient and rational (Nolen-Hoekema, 2001; Bruch and Check, 1995).

CONCLUSION AND RECOMMENDATIONS

The incidence of personality disposition and gender differences on coping with organizational stress and the attendant impact of such variations on workers' performance and organizational effectiveness are obviously x-rayed by the findings of this study. It is however note worthy that in Nigeria, the conditions of organizational life create a series of paradoxes that of course demonstrate the need for balance. Uncertainty sometimes leads to distress, but so can certainty or over control. Same paradox holds true for pressure, responsibility, performance evaluation and job descriptions that constrain individuality. The implication of these findings is that governments, entrepreneurs and other stakeholders in organizational management should take personality and gender into consideration in designing intervention strategies for workers in the vulnerable class. The role of organizational management therefore becomes that of maintaining an appropriate synergy by providing an optimal environment for workers to thrive.

This study therefore posits that researchers should make further enquiries into workers personality in relation to stress in Nigerian establishments (public and private). This becomes particularly germane when the limitations of the study: low sample size, low questionnaire retrieval rate, the researchers' inability to absolutely control for fake responses and lack of time to adequately education respondents prior to questionnaire administration are taken into consideration. Consequent upon a psychological probe into Nigerian workers' personality, this paper also advances some managerial actions considered necessary in stress reduction in Nigerian organizations: clarifying task assignments, responsibility, authority and criteria for performance evaluations including consideration for people into one's leadership style; delegating more effectively and increasing individual autonomy where the situation warrants; clarifying goals and decision criteria and setting/enforcing policies for mandatory vacation and reasonable working hours.

Additionally, stress reduction workshops, tranquilizers, biofeedback, meditation, self-hypnosis and a variety of other relaxation techniques are recommended as intervention strategies which, of course should be recommended and supervised by trained personnel. Apart from these, programmes that teach tolerance for ambiguity often report positive effects. One of the most promising is a health maintenance programme that opines the necessity of proper diet, exercises and sleep. Social support system seems to be extremely effective in preventing or relieving the deleterious effects of stress. Friends and families can provide a nurturing environment that builds self-esteem and makes one less susceptible to stress as Kessler & Nelson (1995) found that government white - collar workers who received support from their supervisors, peers and subordinates experienced fewer physical symptoms of stress.

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