



## Personality and Gender: A Meta – Analysis of Their Effects on Employee Stress

Dr. Manasseh N. Iroegbu

Asso Prof & Consultant, University Of Uyo And Imo State Univeristy

### ABSTRACT

The effects of personality type (extroversion/introversion) and gender (male/female) on employee stress was investigated. Two hundred middle cadre workers made up of 105 males and 95 females were randomly selected from a manufacturing industry in South East of Nigeria. Eysenck Personality Questionnaire (EPQ) and job Related Tension Scale (JTS) were used to determine the personality types and to measure job stress respectively. 2 x 2 factorial design was used for the research while a two way ANOVA for unequal sample sizes was adopted for analysis. The first hypothesis was accepted ( $f(1, 196) = 305.8; p < 0.05$ ) with the extroverted workers showing greater tendencies for job stress than the introverted workers. The second hypothesis was accepted ( $(1, 196) = 11.14; p < 0.05$ ) with the female workers showing greater tendencies to experience job stress than the male workers. There was also a significant interaction between personality type and gender ( $f(1, 196) = 5.02 p < 0.05$ ). The implications of the results were that organizations should try to regulate the quantum of tasks assigned to the female gender as well as extroverts for health reasons to help this group of workers overcome stress.

**Key Words:** Gender, Personality, Work Stress.

### INTRODUCTION

Stress at work has been a thing employees pass through day by day from time immemorial, often silently, individually, unnoticed and without the organization paying much attention to it due to its salient nature. Nevertheless, its been observed that most of the health problems that organizations take care of concerning their staff emanated either directly or indirectly from stress. McGuire (1999) observed that stress entails any situation that is seen as burdensome, threatening, ambiguous or boring and that is likely to affect commitment and well being.

Macleans (2007) concluded that stress is neither a stimulus response nor an intervening variable, but rather a collective term which in its broadest sense is differentiated from other problem areas in that it deals with any demand which taxes the system, be it a physiological system, a social system, or psychological system, and the response of that system to the taxing demands.

Job stress phenomenon involves complicated interactions between the person and the environment. There are therefore two central features of stress at work: dimensions or characteristics of the person (personality) and the potential source of stress in the work environment. The interactions of these two features of stress at work determine either coping or maladaptive behaviour and stress related diseases. (Cooper and Marshall, 1996).

Chang, (1998) in his study indicated that introverts are at a lower risk of anxiety and depression when they confront stress events in the organization. They appraise themselves as being less helpless in the face of stress and adjusted better to negative life events than did extroverts.

Shaw (2000) found that extroverts tend to live under great pressure and are demanding of themselves and others. Strube (1989) on the other hand found that extroverts stand in sharp contrast to introverted people who are more relaxed, more agreeable and have less sense of time urgency.

In relation to gender, both men and women engage in work and they both experience work related stress. Women are more likely than men to experience lasting reaction to traumatic events. That is, they are more likely to experience anxiety, depression, and sleep disturbances that begin soon after a trauma. (Futterlon et al 2000).

Women are more prone than men to stress and by extension, they are more susceptible to all known anxiety disorders. (Nolen Hoeksema, 2001). Compared to men, women have two or three times the rate of panic with agoraphobia, three to four times more specific phobia, one and a half times more social phobia and two times more generalized anxiety disorder (Kessler et al, 1998).

Although men and women both use problem focusing coping, men are more likely to favour it as the first strategy they use when they confront a stressor at work. On the other hand, women, who tend to have larger support network and higher needs for affiliation than men, are more likely than men to seek social support. (Billings and Moos 1998, Schwarzer, 1998).

### Statement of the Problem

The problem to be investigated in this research is to uncover whether extroverted workers experience more stress at work than introverted workers or vice versa.

Secondly, the study seeks to find out if female workers experience more stress at work than the male employees or vice versa.

### Hypotheses

H<sub>1</sub>: Extroverts will show a significantly higher level of stress than introverts

H<sub>2</sub>: Female gender will show a significantly higher level of stress than the male gender.

## METHODOLOGY

**Participants:** 200 middle cadre workers were drawn from a soft drink manufacturing industry in South East Nigeria through simple random sampling. There were 105 males and 95 females with a mean age of 32 years.

### Instruments

Eysenck Personality Questionnaire (EPQ) was used to identify extroverts and introverts. It has 21 items responded "Yes" (1) or "No" (0). Scores  $\geq 13.32$  represents male extroverts, while scores  $\geq 14.48$  represents female extroverts. Scores  $< 13.32$  represents male introverts while scores  $< 14.48$  represents female introverts. The reliability of the scale for Nigerian samples were  $r = 0.60$  for males and  $0.68$  for females. (Eysenck and Adelaja, 1978). Job Related Tension Scale (JTS) was used to measure stress. It has 15 items and a 5 point likert scale. The total score was divided by 15 to obtain a worker's stress level. Scores  $\geq 2.84$  represents a stressed male worker while scores  $\geq 2.81$  represents a stressed female worker. The reliability and validity of the scale for Nigerian samples were  $0.87$  and  $0.46$ . (Oseghare 1998).

### Procedure

The instruments were administered to the workers in their work environment. They were chosen through simple random sampling from the middle cadre of the organization.

### Design

The research utilized a 2x 2 factorial design i.e two independent variables: Gender (M/F), Personality (Extroverts/Introverts) and the Dependent variable – Stress.

### Statistics

The statistical analysis was done with the 2 – way analysis of variance (ANOVA) for unequal sample sizes. The F-test was used for interpretation of results.

## RESULTS

Table 1: Summary Table of 2 – Way Anova of the Effects of Personality and Gender on Employee Stress.

Sov	Ss	Df	Ms	F	P
A (Personality)	1350	1	1350	305.8	<.05 sig
B (Gender)	49.02	1	49.02	11.14	<.05 sig
AB (Interaction)	22.11	1	22.11	5.02	<.05 sig
S/AB	862.5	196	4.4		
<b>Total</b>	<b>2283.63</b>	<b>199</b>			

Results indicated that there was a statistically significant difference between extroversion and introversion on occupational stress ( $f(1, 196) = 305.8$ ;  $p < 0.05$ ), with the extroverted workers showing greater tendency for stress than the introverted workers. It was also observed that there existed a statistically significant difference between males and females on occupational stress ( $f(1, 196) = 11.14$ ;  $p < 0.05$ ), with the female workers showing greater tendency for stress, than the male workers.

Based on the result from table 1 the first hypothesis which stated that there would be a statistically significant difference between extroversion and introversion on occupational stress was accepted. The second hypothesis which stated that there would be a statistically significant difference between males and females on occupational stress was also accepted. Furthermore, the results also showed that there was a statistically significant interaction between personality type and gender ( $f(1, 196) = 5.02$ ;  $p < 0.05$ ).

## DISCUSSION

The findings of this study suggest that the personality type of workers play a prominent role in workers experience of stress in organizations. Gender is also implicated in this regard.

Extroverted workers are more prone to stress than introverted workers. The result is probably because extroverts are active, optimistic, social and outgoing. Thus, if the work environment does not favour these activities stress is easily triggered. Also the fact that extroverts are always full of activities makes them more prone to stress because they carry too many tasks beyond their human capacity.

On the other hand, females seem to experience greater stress level than males in the organization. This could be as a result of the social roles which saddle them with more responsibilities in the family, as well as the fact that they are the weaker sex, since the work in this kind of industry is energy sapping. In addition, it is known that women are very emotional and emotional upheavals bring about tension and stress.

## CONCLUSION

This research have shown that extroverted workers and the female gender are the ones more affected by stress in the work organizations. While stress at work is neither personality specific nor gender specific, the reaction, response and effect of stress may tell more on the lives of extroverts and the female gender.

## RECOMMENDATIONS

Personality and gender differentials and the attendant influence of such on stress cannot be overemphasized. These variations when thoughtfully used by managers can help reduce job stress, thereby increasing productivity and job satisfaction. However, when they are wrongly combined or out rightly ignored, they can enhance job stress, reduce efficiency and bring about unhappy relationship.

It is therefore essential for managers of human resources to carry out periodic and systematic study and appraisal of influence that workers' personality disposition and gender would have on their assigned tasks, duties and responsibilities and the collective incidence of these on the knowledge, skills and abilities needed to carry out these responsibilities.

It therefore stands to reason that work-related stressors such as physical or environmental, role-related, interpersonal and organizational stressors could be curtailed in both extrovert and introvert workers through the provision of avenue for satisfying social needs, frequent training and management development, company physical fitness programme, good wages and salaries, improvement of employees' status with security of employment and stability of income, promotion and career upliftment, provision of proper role and equity in work environment. These would go a long way in reducing organizational stress.

## REFERENCES

- Billings, A. G., & Moos, R. H. (1998). The role of Coping Responses and social Resources in Attenuating the Stress of life Events. *Journal of Behavioural Medicine*, 4, 139 – 157.
- Chang, E. (1986). Dispositional Optimism and Primary and Secondary Appraisal of a Stressor: Controlling for Confounding Influences and Relationship to Coping and Psychological and Physical Adjustment. *Journal of Personality and Social Psychology*, 74, 1109 – 1120.
- Cooper, C. L. and Marshal, J., (1976) *Occupational Sources of Stress*. Wiley Online Library Journal. Online Library. [wiley.com/../](http://wiley.com/../)
- Eysenck, S. B. G. Adelaja, O, and Eysenck, H. J. (1978). A Comparative Study of Personality in Nigeria and English Subjects. *Journal of Social Psychologist*. 102, 172, 178.
- Eysenck H. J. (1971). *Reading in Extraversion – Introversion*. New York Wiley.
- Futtelton, C. S., Ursano, R. J. Pstein, R. S. Crowledy B., Vance, K., Koa, T. C., Dougall, A., Baum, A. (2000). Gender Difference in Post Traumatic Stress Disorder after motor accident. *American Journal of Psychiatry*. 158, 1486-1491.
- Kessler, R. O, McGonagle, K.A., Zhao, S., Nelson, C. B, Hughes, M., (1998) Life time: Co-morbidities between Social Phobia and Mood. [www.qucosa.de/..../400pdf](http://www.qucosa.de/..../400pdf).
- Macleans, C. A. (2007) Dealing with the Stressed: Work place Stress Costs us dearly, and yet nobody knows what it is or how to deal with it. [www.macleans.ca/work/dealing](http://www.macleans.ca/work/dealing) with it.
- McGuire, P. A. (1999). Worker Stress: Health Reaching Critical Point. *APA Monitor*, 30, 26-27.
- Nolen-Hoeksma's (2001). *Abnormal Psychology: Boston*: McGraw-hill.
- Oseghare, C. K. (1998). *An Evaluation Study of Mclean Stressor Checklist*. Department of Psychology Research Project University of Lagos.
- Schwarzer, B. L., (1998). Stress and Coping from Social-Cognitive Perspective. *Animals of New York Academy of Science*, 851, 531-537.
- Shaw, W. (2000). Extraversion, introversion. *Encyclopedia of Stress*. San Diego: Academic Press.
- Strube (1989). *Psychoneuro Immunology*. New York: Brain Publishers.