

THE POSITION OF STRESS AND EDUCATIONAL SUCCESS IN SOMATIZATION DISORDER

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Abstract

The study was designed to investigate the position of stress and educational success in manifestation of somatic symptoms. Two Hundred and Thirty-Two (232) i.e., 90 postgraduate, 90 undergraduate students and 52 staff volunteered and randomly drawn using accidental random sampling technique from Chukwuemeka Odumegwu Ojukwu University Igbariam, Anambra State of which 120 were females and 112 males respectively, participated in the study. Their age ranged between 28–48 years of age with average mean age of 38. Two instruments were used for the study which includes the Enugu Somatization Scale–Revised (ESS–R) developed by Ebigbo in 1982 which was found to have Cronbach's coefficient alpha of 0.94 and a split half reliability of 0.82, and the University of Nigeria Stress Scale (UNSS) developed by Onyeizugbo (2007) found also to have a cronbach alpha of $r=0.91$ and Split half reliability of $r = 90$, factor analysis showed that UNSS has only one valid factor, thus the whole 51 items must be used to ascertain a person's level of stress. The norm for the UNSS is 99, hence scores of 99 and below indicate low stress where as score of 100 and above indicates high stress. A survey design was adopted for the study and 2 x 2 analysis of variance (ANOVA) was used for the data analysis. The result of the study revealed that stress and educational success had a significant effect in the manifestation of somatic symptoms, $F(1, 224) = 79.9; P < .001$, and $F(1, 244) = 5.20; P < 0.5$, respectively. There were no interaction effect between stress and educational success in the manifestation of somatic symptom, $F(1, 224) = 48; P > 0.5$. Discuss of the result together with the recommendation were made.

Keywords: Stress, Educational success and Somatization Disorders.

Introduction

The term somatization simply refers to a somatoform disorder characterized by a history of several years of somatic symptoms beginning before age 30 and resulting in medical treatment or significant impairment in social, occupational, or other areas of functioning. According to DSM – IV diagnostic criteria, there must be pain associated with at least four separate bodily sites or functions, and at least two gastrointestinal symptoms, apart from pain, at least one reproductive sexual symptom apart from pain, and at least one pseudo-neurological symptom not limited to pain (impairment in coordination or balance, *paralysis,* dysphagia, *diplopia, or some such symptom). Also called Briquet's syndrome. Somatization is basically an unconscious process in which physical symptoms stand in for psychological distress. (Nehi,2012). However, Ebigbo (1986) defined

somatization as a defense mechanism whereby psychological distress channeled into somatic complaints, thereby preventing the symptoms of a full-fledge mental break-down. Somatic symptoms serves as cultural idioms of distress (Janakiramiah, 1983, Ebigbo, 1996) in many ethno cultural group and if misinterpreted by the clinician may lead to unnecessary diagnostic procedures or in appropriate treatment. Very often, Nigerian cannot afford to break down, since no one will take over his or her responsibilities and he/she is forced to cope with somatic distress for a long time (Ebigbo 1996). The Nigerian society is one that stigmatizes the mentally ill. Due to this fact, people who experience psychological distress often resort to somatization as a form of defense mechanism. In other words, the Nigerian cannot afford to break down mentally but can afford to break down physically. Ryder (2002) noted that self serves, as a bridge between culture and psychopathology and any attempted to capture the culture specific nature of somatization should be done taking into cognizance the fact that the tripartite cannot be splinted. In other words somatization should be seen from what the culture accepts and dispels since culture is more revered than the individual. The individual is hence seen to be subjected to what the culture dictates, since culture nurtures certain disturbance and dispels others (Ebigbo,1996).

Somatization as it is understood today is a phenomenon where a person becomes somatically preoccupied. Typically there are underlying feeling of depression, anxiety or other feeling, which are not recognized or acknowledged by the person. Instead what the person may be aware of is the physical correlates of these underlying difficulties for instance the somatizer may not recognized that he/she is anxious but may report difficulty in breathing. The very fact that psychological difficulties are seen as weaknesses makes it Shameful for a person to admit that he/she has such a problem thus our society fosters somatization (Bruns,1998). This and other forces at play in the society encourage people to medicalize their psychological difficulties. As a result of these various pressures, person who are really psychiatric end up being seen by the medical systems. This could be a frustrating experience for all involved, the somatizers do get better and physician feels frustrated. In essence, the somatizers are like round pegs in square holes.

Stress has been observed to be closely associated with somatization. Researchers have conceptualized stress in three ways. In one approach, stress is seen as a stimulus and studies focus on the impact of stressor. Another approach treats stress as a response - psychological strains that stressor produce. The third approach proposes that stress is a process that involves continuous interactions and adjustments - or transactions - between the person and the environment. These three views leads to definition of stress, the condition that result when person - environment transactions lead to a perceived discrepancy between the demands of a situations and the resources of the persons biological, psychological and social systems (Ogbogu 2015). Not all stress is bad though. Eustress is Selye's term for the positive features of stress (Selye, 1983). Through significant research, health problems encountered in life have been attributed to stress (Distress). Stress has been implicated in various forms of pathology including psychosomatic disorders (Akin, 2008). When physical symptoms are caused by mental or emotional stress, it is called somatization, for instance many people could have occasional headache caused by mental stress. Somatic symptoms often occur in reaction to stressful situation. An organism's psychological response to stress is referred to as stress reaction. Stress reaction is generally typified by the disturbances of body equilibrium or homeostasis in which the hypothalamus – pituitary – adrenal system is usually followed by behavioural attempts to deal with the stressor or

with the stress reaction itself. These studies intend to find out if stress has a position or plays a significant role in the manifestation of somatic symptoms.

Education is seen as an act of impacting skills and rules to someone else usually the learner, by the professionals, master or teacher. Basically there are two reasons for education. First to train human, think right and make decisions, secondly, through the success of education, a person is enable to receive information from the external world, to acquaint him/her with past history and receive all necessary information regarding the past. The study also intend to find out how educational success has a position or plays a significant role in the manifestations of somatic symptoms.

The neurological theory of somatization symptoms posits that somatic systems result from dysfunction in the neuro–endocrine system responsible for processing peripheral sensory and central emotional information. According to this theory, affected individuals describe normal autonomic sensations and interpret them in a catastrophizing manner, they also misperceive normal bodily sensation or emotional signals as evidence of a dangerous somatic process (Rief, Hiller, and Margrat, 1998). As discussed by Freud and his followers, psychodynamic theory holds that somatic symptoms arise solely from the mind. They represent the outward express of internal psychological conflict that the individual find so unacceptable to reveal consciously. In other words, they arise when serious conflict are converted into physical symptoms. Because the conflict is intolerable to the conscious mind it is not acknowledged but then the socially acceptable are adopted as ways of expressing distress. According to these theory, two specific unconscious mechanisms are at work in somatization.

The primary gain and the secondary gain, The primary gain is achieve keeping the inner conflict out of awareness and the secondary gain is achieved when the bodily symptoms are mobilize to give support from the environment or avoid unpleasant activities.

Cognitive behavioral theories of somatization focus on a person's pattern of attribution and beliefs, which may cause him/her to experiences physical sensations in certain ways. These theorists believed that the way individuals interprets their experience determine how they feel and behave (chamberlain, 2003). Somatization symptoms according to them arise from incorrect beliefs about bodily sensations and function. These belief could arise from things happening in ones environment. Beliefs, attitude and expectations about illness are form during childhood, for instance, from the way people were treated by parent when ill, how much support he/she got, whether it afforded escapes from responsibilities or dislike chores.

The scio-cultural theory of samatization is based on the fact that peoples culture affects the way in which somatic representation of emotional distress are expressed. Basically the theory hypothesizes that individual described and experience their psychological distress due to lack of insight into their emotion and because of limited social tolerance of psychological complaints (Ebigbo,1986). According to them, this theory accounts for the high rate of samtization disorder among non-industrialized countries and individuals of lower socio-economic status who do not have the financial means or opportunity to be introspective. The emotional processing theory of somatization posits that unprocessed emotions may be experience somatically with little awareness that emotion is involved. Problems with processing emotion could be as a result of failure to register and respond to important events, a block in the ability to experiences emotion, or feeling overwhelmed by emotion (Buck, 1985). Each of these theories has a role to play in the etiology and

maintenance of somatization. In essence somatization could occur as a result of any of these propositions or a combination of one or two of them.

Somatization symptoms have been hypothesized to relate to chronic stress related illness as the external expression of psychological distress (Lim, 2006). Lim carried out a study to examine the relationship between somatization symptoms and stress related factors such as stress experiences, perception and coping methods among Korean middle-aged women. The result of the study showed that stress related factor particularly perceived stress level significantly relates to somatization symptoms for Korean middle-aged women (Lim,2006). This shows that how people perceives stress may influence the degree to which they express psychological distress in the form of physical symptoms. Choenarom, Williams and Hagerty (2008) reporter that a number of researches have demonstrated that stress and depression form a vicious cycle in which one aggravates the other. When stress is long lasting, depression may develop insidiously under the cloak of chronic stress symptom. Choenarom et. al (2008) also reported that nearly all individual with major depressive disorder reports significant life stress before the episode. Also in Nigerian a epidemiological survey in 1963 showed that 79-97% of the psychiatric cases identified presented with bodily symptoms' which are describe as "psycho physiological symptoms". Psycho-physiological complaints are often formulated as subjective bodily sensation including heat in the head and body, sensation of heaviness in the brain, a sense that the heart is flying out and melting and lump in the throat several medical and psychiatric practitioners in Africa have described these complaint as somatization of emotional distress (Ebigbo,1996, Fallon, 2000, and Igbokwe, 2002). In a cross - sectional study of somatic complaint of Nigerian women, using the Enugu Somatization Scale, Ebigbo (1986) described a culture using specific nature of somatic distress by noting that very often the Nigerians cannot afford to break down since no one will take over his/her responsibilities and he/she is forced to cope with somatic distress for a long time.

Ayorinde (1977) in a study, 'heat in the head or body : A semantic confusion'' noted that 'the head or pain in the back or creepy feelings in leg is a valuable non verbal communication. This is because it gives the psychiatrist some hint that his/her client/patient, who may verbally deny any psychic distress is actually under some unbearable psychological stress. Ebigbo an Ihezue (1982) also observed that psychiatric patient complain of somatic symptoms independently of the diagnosis reached thereby confirming previous study (Ayoridnde, 1977) in suggesting that psychogenic dyaesthesia can occur in neurosis, depression and psychosis. Igbokwe (200) carried out factors analytic study on the Enugu Somatization Scale and found out that the scale has only one valid pure factors. Hence it is non-dimensional scale, which measures somatization alone. This present study is also making use of the Scale to find out the position of stress and educational success in the presentation of somatic symptoms. From the empirical review, it can be seen that a number of studies have been carried out in the area of somatization. A number of researches have been done to show that stress has a position and or plays an important role and also has significant relationship with somatization (Lim, 2006). This study intend to verify and find out if stress and educational success has a position or a role to play in somatizaion. However, if any studies have been done to determine the position of stress and educational success in the manifestations of somatic symptoms, this researches work intends to help narrow this gap.

Method

Participants

The participants were two hundred and thirty-two (232) i.e. 90 post-graduate, 90 undergraduate students and 52 staff (120 females and 112 male) volunteered and randomly drawn using accidental random sampling technique from Chukwuemeka Odumegwu Ojukwu University Igbaram, Anambra State with their age ranged between 28 - 48 years of age and average mean age of 38.

Instrument

One of the scales used was the Enugu Somatization Scale-Revised (ESS-R) developed by Ebigo in 1982. The scale is a 65-items scale made of somatic complaints drawn from protocols of patients treated at the psychiatric hospital Enugu from 1978-1981. The scale has two sections ‘head’ items 1– 23 and ‘body’ items 24–65 . The ESS-R was found to be reliable and valid in distinguishing normal from abnormal (Ebigo 1982,1986). It was found to have Cronbach’s coefficient alpha of 0.94. The scale has a Yes or No response option with a score of one assigned to any yes response and Zero to any No response. The ESS-R was found to have a split half-reliability of 0.82. It was also cross validated with Neurotic Illness Questionnaire (NIQ) and was found to correlate significantly with it ($R=0.67$), thereby establishing its concurrent validity.

The other instrument used was the University Of Nigeria Stress Scale (UNSS) developed by Onyeizugbo (2007). It is a 51 Likert-type scale with the following response options: always (5), very often (4), often (3), Sometimes (2), rarely (1). The highest score on the scale is 260 where as the lowest score is 51. The UNSS was administered to 100 participants drawn from staff and students of a tertiary institution. The data was subjected to item analysis, resulting in 51 items that had $r=0.30$ and above, thus reducing the original items from 65 to 51. The scale was found to have Cronbach alpha of $r=0.91$ and split half reliability of $r=0.90$. Factor analysis showed that UNSS has only one valid factor thus the whole 51 items must be used to ascertain a person level of stress. The norm of the UNSS is 99, hence score of 99 and below indicate low stress where as score of 100 and above indicate high stress. In this study, the UNSS was used to measure participant’s level of stress.

Procedure

The instruments were administered to the volunteered and randomly drawn participants during their lecture free periods and break time. They were given instructions on how to fill the instruments and after filling, the instruments were collected immediately. This instrument was later scored and was used for data analysis.

Design/Statistics

A survey design was adopted and 2 x 2 analysis of variance (ANOVA) statistics was used to test the hypotheses.

Results

Summary table. **Table 1:** Mean scores and standard Deviation of the various groups on the Enugu Somatization scale – Revised (ESS – R)

Variables		Mean	Standard Deviation
Stress	High	45.03	3.29
	Low	12.24	1.62
Educational success	High	32.82	2.11
	Low	24.46	3.00

Table II: ANOVA Summary Table

Source	Sum of square	Df	Mean square	F	Sig
Stress (A)	24239.774	1	24239.774	79.903	.00
Educational Stress (B)	1576.491	1	1576.491	5.197	0.24
AXB	146.787	1	146.787	484	.487
Error	67954.167	224	303.367		

The results shows that stress had a significant main effect on manifestation of somatic symptoms, as shown in table II, $f(1,224) = 79.90; P < .05$, therefore the first null hypothesis which stated that there will be no statistical significant difference between participants who experience high stress and those who experienced low stress in manifestation of somatic symptoms was rejected. As shown in table 1, the mean score for those who experience high stress was higher ($M = 45.03; SD = 3.29$) than that of those who experienced low stress ($M = 12.24, SD = 1.62$) showing that participants with high stress manifested more somatic symptoms than those with low stress.

Educational success also had a significant effect on the manifestation of somatic symptoms, as table II shows, $F(1,224) = 5.20; P < .05$, the second null hypothesis which states that there will be no statistical significant difference between participants with low educational success and those with higher educational success in manifestation of somatic symptoms was also rejected. Table 1 showed that the main score for participants of high educational success was higher ($M = 32.82, SD = 2.11$) than that of participants of low educational success ($M = 24.46; SD = 3.00$) showing that those with higher educational success manifested more somatic symptoms than those with lower educational success. The result also showed that there was no statistical significant interaction effect between stress and educational success in the manifestation of somatic symptom as shown in table II, $F(1, 224) = 48, P > .05$.

Discussion

This study considered the position of two variables (stress and educational success) in the manifestation of somatic symptoms. Stress has a significant position or plays a significant role in the manifestation of somatic symptoms thus the hypothesis that there will be no difference between participants who experience high stress and those who experience low stress in the manifestation of somatic symptoms was rejected. It was discovered that participants who experience high stress manifested more somatic symptoms than those who experience low stress. This finding is similar to the findings of Lim (2006) who reported that stress related factors is significantly related to somatization symptom for Korean middle age women. This finding is also in consonance with the studies by Breslau (2001) and Andreski, Chilcoat and Breslau, (1980) who reported the significant role played by a

posttraumatic stress disorder in somatization disorder. This finding implies that predisposition of people to somatization can result to stress, thus if stress is not properly manage it could lead to psychological distress, which may then be expressed as bodily symptom as a form of defense mechanism, to avoid a full fledged mental breakdown.

Educational success has a significant position or plays a significant role in the manifestation of somatic symptoms, thus the second hypotheses which states that there will be no statistical significant difference between participants with high educational success and those with low educational success in the manifestation of somatic symptoms was also rejected. It was observed that those with high educational success manifested more somatic symptoms than those with low educational success. This also supports the findings of Gautam (1976), Janakiramiah (1983) who reported from their research that educational status influence the frequency of somatic symptoms. However, it contradicts the findings of Escobar and Gara, (2000) who reported that low educational success is associated with somatization. Finally, stress and educational success has no interaction effect in the manifestation of somatic symptoms or somatization disorder.

Mental health professionals should educate the public on various stress management strategies, so that people can manage their stress properly, thereby the risk of somatization can be reduced or prevented. It was also discovered by the researcher that somatization is a common phenomena among Nigerians and a lot of people do not know about it. Awareness should be made by professionals and clinical psychologists and other mental health practitioner on this issue so that people experiencing psychological distress can be assured that they can get treatment from psychotherapists or mental health professionals to help them with their psychological problems.

REFERENCES

- Akin, A. (2008). Self-efficacy, achievements, Goals and depression, anxiety and stress: A structural equation modeling. *World applied science journal* 3(5) 725 – 732.
- American Psychiatric Association (1994). Diagnostic and statistical Manual of mental disorders, 4thed. (DSM-IV) Washington, DC American Psychiatric Association.
- Andreski, P., Chilcoat, H., Breslau, N. (1980). Posttraumatic stress Disorder and somatization symptoms: A prospective study, *Psychiatry Research*, 79(2), 131 – 138.
- Ayorinde, A. (1977). Heat in the Head or Body. A semantic confusion. *African Journal of Psychiatry* 1(2), 59 – 63.
- Breslau, O. (2001). Somatization: A critical Review of Conceptual and Methodological issues. *Psychosomatics*, 43 – 1 – 9.
- Bruns, D. (1998). The problem of somatization. Retrieved from Worldwide web on 24/03/2007 <http://www.healthpsych.com>.
- Buck, R. (1985). Prime Theory: An intergrated view of motivation and Emotion. *Psychological Review*, 92, 389-413.
- Chamberlain, J.R. (2003). Approaches to somatoform disorders in primary care. *Advanced studies in medicine*, 3(8), 438 – 447.

- Choenarom, C., Williams, R.A., and Hargert, R.M. (2008). The Role of sense of belonging and social support on stress and depression in individuals with Depression. *Archives of Psychosomatic Research, 38, 119 – 127.*
- Ebigbo, P.O (1996). Somatic complaints of Nigerians. *Journal of psychology in Africa (south of sahara, the Caribbean and afro-Latin America) 1 (6) 28-49.*
- Ebigbo, P.O. (1982). The Development of Culture specific Nigeria Screening Scale of Somatic complaint psychiatric Disturbance. *Culture, Medicine and Psychiatric, 6, 29 – 43.*
- Ebigbo, P.O. (1985). Idioms of Expression Among Nigerian in Health and Disease. Second Annual Conference of the Nigeria Psychological Society, University of IFE, May 7 – 10.
- Ebigbo, P.O. (1986). A cross-sectional study of Nigerian females using the Enugu Somatization scale. *Culture, medicine and psychiatric, 10, 167-185.*
- Ecobar, J.I, and Gara, M. A. (2000). Somatization and hypochondriasis. In H.S, Friedman (ed.) *Encyclopedia of mental health(vol3). Sam Diago: Academic press.*
- Fallon, B.A. (2000). Hypochondriasis and it's Relationship to obsessive compulsive disorder. *Psychiatr. Clin. north Am 23 (3) 605-616*
- Guatam, S.K. (1976). A comprehensive study of patients presenting with somatic symptoms. *Journal of Health Psychology 1 (6) 28-49.*
- Hargetty, W.I. (2008). *Clinical Behavioural Medicine some concepts and procedures.* New York platinum.
- Igbokwe, O.O (2002). *A factor Analytic study on the Enugu Somatization Scale;* B.SC thesis. Department of psychology ESUT.
- Janakiramiah, N. (1983). Somatic Neurosis in women in India. *Social psychiatry, 15,203-206.*
- Lim, J.(2006). The impact of Stress Related Factors on Somatization Symptoms. [http://sswr.confex.Coin // sswr/ 2006/ technoprogram/ p416.HTM.](http://sswr.confex.coin//sswr/2006/technoprogram/p416.HTM)
- Nehi, U.P. (2012). *Somatization and Psychopathology.* Baltimore: university Park press.
- Ogbogu, U.C. (2015). The collision of self efficacy and gender on Traits Anxiety. *Global Journal of Applied, management and social sciences 9, 136-140*
- Onyeizugbo .U. (2007). The University of Nigeria Stress Symptoms Scale (UNSS) *Nigerian Clinical Psychologists, 2, 7-10*
- Rief, W., Hiller, W., and Margrat, J. (1998). Cognitive Aspects of Hypochondriasis and Somatization syndrome. *Journal of Abnormal Psychology, 107,587-595.*
- Ryder, U.S (2002). Culture and Somatization. *Social Psychiatry, 16,, 202-207.*
- Selye, H. (1983). The stress concept, past, present, future. In C.L. Cooper (ed.) *Stress research,* New York: Wiley.