

Relationship between heat in the head and goal frustration

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Abstract : This study investigated the relationship between heat in the head and goal frustration. A total of 100 participants comprising 45 males and 55 females were selected through purposive sample method. Goal Frustration Index (GFI) developed by Ebigbo(1996) was used to measure goal frustration and Enugu Somatization Scale (ESS) developed by Ebigbo(1986) was used to measure Somatization and Heat in the Head. EX-post facto design was employed for this study. Ch-square (X^2) and T-test was used to test the stated hypotheses. The result indicated that there was a remarkable relationship between heat in the head and goal frustration among the participants $X^2(11.74, N=100) = 6.64, P < .01$. The result also showed that there was statistically significance difference between participants with heat in the head and no heat in the head $X^2(27.04, N=100) = 6.64, P < .01$. There was a remarkable difference between individuals who manifest goal frustration and those who do not $X^2(33.64, N=100) = 6.64, P < .01$. There was also a remarkable difference on the degree of goal frustration amongst participants with heat in the head $X^2(2.1.57, N=100) = 11.34, P < .01$. There was no remarkable difference in the scores of no frustration and frustration participants ESS ($T=0.02, N=100$) = 1.98 $P < .05$. There was no significant difference between the scores of males and females in the ESS $T(=0.25, N=100) = 1.98, P > .05$. Discussions, relevance of the study and implication to the findings were discussed

Key-words: Heat, Head, Goal frustration, Somatization, Gender.

I. Introduction

Somatization disorder has been variously defined and described in many ways by psychologists. However, they all seem to believe that although it appears in apparently physical condition, the genesis and the symptoms remain psychological, that means that there is no evidence of organic dysfunction. In order words if the sufferer or victim desires appropriate treatment, psychological intervention would be necessary. These symptoms may be temporarily relieved using drugs however, but combination with psychotherapy has been reliably shown to be more effective (Ebigbo, 1996).

Individuals evidencing somatization usually complain of some distressing and almost unbearable physical symptoms like heat in head or body, weight sensation, crawling sensation, dizzy spells, itching sensation, burning in some particular parts of the body, headaches and pain etc. In many cases, clients frequent various medical institutions, prayer houses or traditional healers etc without achieving a cure. The Diagnostic and Statistical Manual of Mental Disorders (3rd Edition-Revised) (America Psychiatric Association, 1987) states 35 symptoms that indicate possible somatization disorder. It is a general opinion that major psychosomatic disorders are prevalent all over the world and across many cultures (Gunth rie et al 1975; Pfeifer, 1978; Wannes & Wittower 1982; Deveraux 1977; Trandis & Draguns, 1980). More specifically, it appears that it is widespread and common in West Africa, Prince (1960) and Asia (Janakiramaiah & Subbakishna O.K, 1980; IsengandHsu, 1970).

A number of researches have been carried out in the past to examine the psychodynamic nature and prevalence of somatization disorders in West Africa and Asia alike. Gautam (1976), Jamakiramaiah and Kolkar (1981) observed that in presentation of somatic symptoms, there is no difference in sex, age or occupation rather what influences the degree of occurrence are ethnicity and educational status. Similarly, Prince (1960) studied Nigerian students. He found that many students complained of headache, blurred vision and insomnia, a situation he termed 'Brain fag syndrome'. In their preliminary study, to examine the effect of social/personal factors on well being of students and their academic work, Kumaraswamy and Ebigbo (1984) discovered that biosocial factors contribute to the complaint of somatic symptoms. Out of 132 pre-clinical students studied 16 (12.12%) reported headache, while 98 (74.24%) had sleeplessness, 26 (19.69%) reported difficulty in concentration, while 98 (92.24%) also reported heat sensation in the head and 99(75.00%) revealed heaviness sensation in the head. The importance of these studies is that it shows that somatization is prevalent in our society.

Cultural factors contribute immensely to the exacerbation or reduction of psychopathology. These include attitudes or belief system, social orientation, personality make up, such as external locus of control and to an extent, cultural conflict. Some workers have opined that it is good to understand this fact that it would help one as a clinician to know the patients. It would also help to decode the meaning of the bodily sensations (somatization) the patients manifest since these could be culture bound. Also it would give a clue to the best approach to therapy (Ebigbo & Igezue, 1982 & Leighton et al 1963).

In Africa for example mental or physical illness are believed to arise from external forces such as God or gods, spirit possession, taboo, sorcery, and evil machinations or disturbance in social relations. Thus, impotence or infertility, fear, anxiety, depression, neurotic/psychotic reactions generally could result from one's failure to fulfill traditional rights, breaking of taboo, witchcraft attack, evil eyes, or breaking spirit accord to name but a few. On the other hand, Lambo and Prince noted that long permissiveness at the early development stage of an African child leads to personality types called oral personality which eventually delays the occurrence of anxiety provoking situations and conflicts related to a child's experience. The oral personality faces difficulties when confronted with anal demands (e.g. discipline and punctuality, etc).

Furthermore, the orientation of the oral personality during the process of development makes them to acquire a type of cognitive style known as external locus of control which is described as a mindset which attributes causation of events in their lives to external forces rather to themselves. While those of internal locus control believe that they are responsible for what happens to them in their live. People with external locus of control believe in chance, gods or powerful others. They tend to be powerless when they face a problem situation demanding their active response. Also, because he/she has been given to spirit world-explanation he/she puts less effort to solve personal problems (Abudu, 1986). This magical thinking according to Uzoka (1998) creates series of problems. For example in the world of one with external locus of control the native doctor would be considered the answer to examination success. This type of orientation generates stress, poor attitude to work and mental illness or psychological disturbance viewed from a western angle or when exposed to a western setting.

Cultural conflicts as has been noted can induce psychological disturbances for instance according to Ebigbo when an African is removed from his/her Original environment (family, clan) that used to protect him/her and brought into a western setting, the chances of experiencing mental illness is very high, since they are not acquainted with the western way of life. Based on the above conditions, the personality of the individual, coping strategy and past experiences, some persons may not be able to cope with some stressful conditions. Consequently, when people cannot cope or find the situation unbearable, they could manifest physical symptoms of somatic origin (Mbanefo, 1966; Collomb and Leighton 1961). Ayorinde (1977) suggested that somatic or a body complaint is an indication of unbearable psychological stress. It manifests in many psychosocial problems e.g. functional psychoses, brain-fag syndrome, anxiety disorder and depression, Ebigbo (1986, 1984). A sizeable number of mentally ill patients reveal somatic distress independently of diagnoses of level of mental illness (Ayorinde, 1977; Mbanefo, 1966; Okhomina & Ebie, 1973).

According to Ebigbo (1982) Africans do not see the mind as something separate from the body and vice visa. Ebigbo sees Somatization as a body language idiom of expression; defense mechanism and scapegoat where the individual is allowed to momentarily escape an unresolved conflict. Psycho-physiological complaint are formulated as bodily sensations including heat in the head and body etc.. Heat in the head it has been described as a somatization of goal related anxiety or frustration Ebigbo and Ihezue (1981). There is extreme warmth experience in the head and it is accompanied by distressing sensation like internal body heat, the individual feels a heavy load packed in his/her head. According to Ebigbo and Obiako (1984) the symptom sometimes fluctuates, coming at intervals. It could also have a mild effect on the individual. When serious, the individual would be restless and he/she would feel like scrapping his/her head, believing that too much hair could increase the illness. Using 22 patients to examine the developmental conditions of these symptoms Ebigbo and Ihezue concluded that heat in the head is used by the melancholic (unstable introvert) and choleric (Unstable extrovert) types of personality especially men. These clients usually fall within the developmental ages of 17-24 and 25-34 respectively, that is prime age when there is high expectation to survive or to enter an institution of higher learning and it also occurs when an individual having acquired a profession wishes to settle down for a profession and position of responsibility. Among this group, Ebigbo and Obiako (1984) observed that those that complained of heat in the head had frustration which gave rise to the symptom. Ebigbo and Ihezue similarly explained that there is no significant difference in the presentation of symptom between the male-female groups. The hypothesis on whether heat in the head is related to goal frustration was tried on secondary school students and mothers attending antenatal clinic. It was discovered that the symptoms were less among the 14-15 years old class JSS 3 students but manifested more among the SS2 students who were facing difficult examination subjects and SS3 students facing their university entrance examination and school certificate examinations which if they fail would block their chances of attending an institution of higher learning, but very high among

infertility clinic attendees. The concept of frustration in this context refers to the blockage of the individual's goal/target.

Some examples of situation that are frustrating and which could lead to the symptom manifestation include.

- A man who has invested a large sum of money in a business and suddenly the business collapsed.
- A woman who has been having normal pregnancy or delivery without having the expected sex (boy or girl) and suddenly stop being pregnant.

This is much more serious in a society where the male child is highly valued and the woman stops getting pregnant without having had a son (that is, a woman whose children are only females and she stops getting pregnant). This situation actually deprives those mothers of the social recognition they deserve. Worse still is if she has no child at all neither males nor females.

- A disappointment from a loved one could also be frustrating leading to the symptom of heat in the head or outright depression as the case may be.

Another typical frustration situation is when someone's hope to study in the university is shattered because of the death of the individual's sponsor or failing to acquire school certificate or pass the JAMB examination. There are a lot of serious situation that exist in the world that could lead to mental illness or somatization and in this case heat in the head. Harmony restoration is useful in treating such case; mild symptoms could be relieved using antidepressant and anti anxiety drugs. In some cases a combination of drugs and psychotherapy is quite beneficial. Harmony restoration therapy is one of the indigenous therapeutic measures developed by Ebigho et al (1995) to strengthen dysfunctional relationship where it exists or even make the already functional one stronger.

Emma, Nadia, Winifred, Rien van der (2009) in their study on "Daily Frustration, Cognitive Coping and Coping Efficacy in Adolescent Headache: A Daily Diary Study". Using Eighty-nine adolescents aged 13-21 completed an online daily diary for 3 weeks. Data were analyzed using multilevel modelling. Results indicated that daily frustration of goal pursuits was significantly related to both same day and next day headache occurrence. Also coping efficacy beliefs were significantly related to lower next day headache occurrence (no same day relationship was found). None of the cognitive coping strategies used in response to daily frustration were related to headache occurrence on the same or next day. The study concluded that daily frustration to goal pursuit is suggested to be an important stressor contributing to concurrent and prospective headache occurrence. Furthermore, the extent to which adolescents believe in their ability to cope also appears to influence experience of subsequent headache. Further prospective studies are necessary to confirm these findings and to further Unravel the possibly reciprocal relations between these factors. These findings offer useful insights into the dynamic interplay between daily stressful experiences and headache in youths.

Previous research has highlighted the possible role of stress in the precipitation and chronification of headache. Holm, Lokken and Mayer (1997) and Spierings, Sorbi, Haimowitz and Tellgen (1996) their studies have particularly emphasized the role of proximal daily stressors rather than major life events. Benedittis and Lorenzetti (1992) and Fernandez and Sheffield (1996) similarly, among high school students with headache the most commonly reported cause of headache was stress, reported by 40% of the adolescents. 19 Studies with adolescents have indicated that (daily) stress is related to higher levels of pain and somatic complaints.

Passchier, and Orlebeke (1985), Sundblad, Jansson, Saartok, Renstrom and Engstrom (2008) and Walker, Garber, Smith, van Slyke, & Claar. (2001) studies had investigated the prospective relationship however are inconclusive. A number of prospective studies have failed to find evidence for a predictive relationship between psychosocial stress and pain, although these factors were found to covary. Gil, Carson, and Porter (2003) and

White, and Farrell, (2006) Moreover, the prospective impact of daily frustration on headache in adolescence has yet to be investigated.

According to the expanded stress-coping model, the ways in which an individual copes with stressors are likely to impact upon physical outcomes. We suggest therefore that cognitive strategies used to cope with daily frustrations are likely to be related to headache

complaints. Research on the impact of stress coping strategies on pain in adolescents, however, is scarce. In male adolescents, use of depressive, palliative, and avoidant coping strategies has been related cross-sectionally to greater headache intensity.

Van den Bree, Passchier and Emmen (1990) furthermore, among female undergraduates, 1-in-20 participants demonstrated a significant negative relationship between approach-coping and subsequent migraine. 12 With regards to specific cognitive coping strategies, various recent studies have suggested a relationship between rumination and physical health complaints. Brosschot, and van der Doef, (2006) and Thomsen, Mehlsen, & Olesen, (2004) in another cognitive coping strategy extensively investigated and associated with pain is that of catastrophizing. Keefe, Lumley, Anderson, Lynch, Carson, (2001) This strategy is, however, typically measured as a response to pain. The extent to which catastrophizing in response to stress is related to headache has yet to be investigated (Keefe, Affleck, GLeFebvre, Caldwell, & Tennen (1997).

Massey, Garnefski, & Gebhardt,(2008)in their study on “Goal frustration, coping and well-being in the context of adolescent headache: A self-regulation approach”. Using 1202 adolescents aged 12 – 18 completed self-report questionnaires in schools. Adolescents were divided into three groups based on their experience of headache: no headache reported (38%); monthly headache (40%); weekly headache (18%). Results show that these groups did not differ with respect to the importance they attach to goals. They did, however, differ according to experience of goal frustration, use of strategies to cope with goal frustration and well-being, although effect sizes were small. After controlling for individual and headache characteristics, frustration of self acceptance and health goals, and the use of self blame, rumination and other blame were consistently related to lower well-being. Moreover, interactions with headache group indicated that for adolescents with weekly headache, greater frustration of school and self acceptance goals and a lower importance assigned to health goals was more detrimental to well-being than for those with no headache complaints. We conclude that frustration to goal pursuit and strategies for coping with this frustration are important factors in adolescent well-being and may offer important targets for intervention.

In view of this issues mention above, this present study tend to address the following: Purpose to the study find out whether: (1) Heat in the head has any significant relationship with goal frustration. (2) Male and female participants differ in their heat in the head score. (3) Male and female participants differ in their goal frustration score. These studies also address the following statement to the problem:(1). Is there a relationship between heat in the head and goal frustration?. (2). Will male and female participants differ in their experience of heat in the head?.(3). Will male and female participants differ in their experience of goal frustration?.Due to the literature reviewed above, the following hypotheses are stated: (1).There will be no relationship between heat in the head and goal frustration. (2). There will be no difference between the scores of no frustration and frustration groups. (3). There will be no difference between the scores of male and female in ESS.

II. Method

2.1 Participants

A total of 100 participants comprising, 45 males and 55 females were selected as sample for this study, the subjects for this study also were Institute of Management and Technology students, University of Nigeria Enugu campus students, secondary school class IV/V and class II/III students, infertility clinic attendees' (UNTH), psychiatric patients (NPH) and regular patients (Park lane 'specialist hospital). In addition, 76 out of the 100 participants reported heat in the head out of which only 10 were observed with no goal frustration; while 79 out of the 100 participants reported goal frustration out which only 13 were observed with no heat in the head, hence, only 11 participants had neither heat in the head nor goal frustration; while 66 that reported both heat in the head and goal frustration were referred to as goal frustration groups and the remaining were called no frustration groups.

Among goal frustration 39 are males while 27 are females; and among no frustration 26 are males while 18 are females.

2.2 Instrument

Two sets of instrument were used for data collection, they include Goal frustration index (GFI) and Enugu Somatization scale (ESS) The research instrument used comprises 2 sections. Section A is a 13 item questionnaire designed by the researcher to measure goal frustration, Section B contains the ESS-Enugu somatization scale (Ebigbo, 1986), which is a 65 item questionnaire with a dichotomous response format of Yes/No designed to measure somatization. It has been cross validated with NIQ (Janakirmiah, N. & Kolkar D., 1981). It correlated significantly with Neurotic Illness Questionnaire (NIQ) - CC = 56; Validity and reliability coefficient respectively (vrc) = 69, (Kumaraswamy and Ebigbo, 1984).

It was found reliable in separating normal from abnormal (Ebigbo, 1982, 1986) when used to compare somatic complaints of neurotic and normal students from Nigeria and India respectively. A revalidation of the ESS by Igbokwe (2003), showed internal consistency of 0.94. To score ESS, a score of 1 is assigned to any "yes" response while a score of 0 is assigned for any "No" response. Similarly the positive (Yes) scores are summed up to achieve a diagnosis in comparism with the norm "Head" X = 8.14, Body X = 15.2, SD = 7.21, together i.e. Head and Body, X - 23 - 34, SD = 11.28. An attempt to validate the research instrument yielded a split half reliability coefficient of r - 0.54, on the goal frustration index, and a convergent validity of r = 0.45 between Goal frustration and Enugu Somatization Scale. The scoring of goal frustration index is based on frequency of responses across options with regards to the items used for analysis with reference to items 1 and 2.

2.3 Procedure

A total of 180 copies of the instruments were distributed across the population of interest comprising pregnant women attending antenatal clinics, infertile women attending fertility clinics, SSI and SS2 students, JSS 2 and 3

students, psychiatric clinics attendees, students from Institute of Management and Technology and University of Nigeria Enugu campus, and out patient medical clinics attendees. Twenty copies of the questionnaire were administered in each category using the survey method of distribution. A total of 1000 copies of the questionnaire, which were correctly filled, were scored and analyzed to test the hypotheses.

2.4 Design/Statistics

An ex-post facto design was adopted on the basis of the symptoms having occurred in the recent past. Chi-square was applied as statistics to measure the observed and expected frequency between heat in the head and goal frustration; while T-test was applied as statistic; to measure the difference between the scores of males and females, no frustration and frustration group

III. Result

The following results were obtained. Table 1 and 2 below reflects the finding on hypothesis one that is, that there will be no relationship between goal frustration and heat in the head.

Table 1: Summary table of chi-square on the relationship between heat in the head and goal frustration.

Item1: occasionally I experience heat sensation in my head (ESS).

Item 1: are there any very important goals in life, which you have either failed to achieve or fear seriously, not be able to achieve (GFI).

N	DF	Response		Heat XGF	X ²	P
		Heat in the Head Yes	Goal frustration			
100	1	76	79	X 66	11.74	<.01
		No 24	21			

From table 1 above, X² calculated value of 11.74 is found to be greater than X² critical value of 6.64 at P<.01 level of significance. Therefore hypothesis 1 which stated that there will be no significance relationship between heat in the head and goal frustration is hereby rejected. This means that a remarkable relationship exists between heat in the head and goal frustration.

Table 2: Summary table Chi-square on heat in the head

N	DF	Response		X ²	P
		Heat	No heat		
100	1	76	24	27.04	<.01

From table 2 above X² calculated value of 27.04 is found to be greater than X² critical value of 6.64 at P<.01 level of significance. This outcome also supports the outcome of hypothesis I tested above; hence, a remarkable difference exists between individuals" that indicate heat in the head and those who indicated no heat in the head. Table 3 and 4 below refer to hypothesis one which states' that there will be no relationship between goal frustration and heat in the head

Table 3: Summary table of chi- squares on goal frustration.

N	DF	Response		X ²	P
		Frustration	No frustration		
100	1	79	21	33.64	<.01

From table 3 above X² calculate value of 33.64 is observed to be greater than X² value of 6.64 at P<.01 level of significance, indicating a significant outcome. This means that a remarkable difference exists between individuals who manifest goal frustration and those who do not.

Table 4: Summary table of chi-square on the degree of goal frustration among individuals with heat in head.

Item 2: Despite having failed to achieve it or face serious threat not to be able to achieve do you still seriously desire this goal (GFI).

N	DF	Response				X ²	P
		V. Much	Much	A Little	Non		
76	3	36	17	13	10	21.57	<.01

From table 4 above X calculated value of 21.57 is found to be greater than X critical value of 11.34 at $P < .01$ level of significance. This means that a remarkable difference exists on the degree of goal frustration among individuals with heat in the head.

Table 5 below refer to hypothesis two which states that there will be no difference between the scores of no frustration and frustration groups on the ESS.

Table 5: Summary table of independent T -tests on the difference between the scores of no frustration and frustration on the ESS.

N1	N2	Df	Ex1	Ex2	Ex1 ²	Ex2 ²	XI	X2	t	P
34	66	N1 + N2-2	531	1034	10975	23722	15.62	15.67	0.02	>.05

From table 5 above, T calculated value of 0.02 is found to be less than T critical values of 1.98 at $P > .05$ level of significance. This means that there is no remarkable difference between the scores of no frustration and frustration groups on the ESS.

Tables 6 below refer to hypothesis three which states that there will be no difference between the scores of males and females on the ESS. Table 6: summary

Table of independent t -test on the difference between the scores of males and females on the ESS.

N1	N2	Df	Ex1	Ex2	Ex1 ²	Ex2 ²	XI	X2	t	P
45	55	N1 + N2-2	719	850	16663	19225	15.98	15.45	0.25'	>.05

From table 6 above, t calculate value of 0.25 is found to be less than t critical value of 1.98 at $p > .05$ level of significant. This means that there is no significant difference between the score of males and females on the ESS.

IV. Discussions

The first hypothesis tested which stated that "there will be no significant relationship between goal frustration and heat in the heat" was rejected. This means that a remarkable relationship exists between heat-in the head and goal frustration. Statistics and results of various research works in this area, help put this finding in perspective. Somatic illnesses in this case heat in the head are defined as the manifestation of psychological problems in the form of physical symptoms or illnesses Mbanefo (1996); Collomb & Leighton; (1961), and Ayorinde (1977) noticed that somatic or body complaints are actually an indication of unbearable stress. Such somatic problems often manifest in the form of diverse psychological problem (e.g. functional psychoses, brain fag syndrome, anxiety disorder, depression and heat in the head). Heat in the head has been described as a somatization of goal related anxiety or frustration. The symptom usually involves an extreme feeling experienced in the head which is often accompanied by distressing sensations like internal body heat, and a heavy feeling in the head. The concept of goal frustration on the other hand refers to a blockage of the individual's goal or target. The possibility of a relationship between heat in the head and goal frustration was confirmed in the first hypothesis tested, meaning that an individual who experiences goal frustration resulting from goal blocking is very likely to have heat in the head. Put the other way, heat in the head is the physical manifestation of the existing psychological problem, which in this case is goal frustration. The researcher used two groups of participants.

The treatment group comprised individuals who had a particular pressing goal at the time of the experiment like Institute of Management and technology students, class 4 and 5 students, infertile woman, and psychiatric patients. The treatment groups were compared with the control groups comprising individuals' with no particular or specific goal in sight and so were unlikely to experience goal frustration. They include University of Nigeria Enugu Campus students, JSS 2 and 3 'students, pregnant women and regular patients. The individuals in group I with specific goals, in sight were observed to have a higher tendency of experiencing heat in the head owing to the possibility of their goals being thwarted. The individuals' in-group 2 who obviously did not have any pressing goal in sight was noted to be less likely to experience heat in head. This means that people who encounter goal frustration owing to goal blockage are very likely to experience heat in the head.

The second hypothesis tested which stated that "there will be no significant difference between the no frustration and frustration groups in ESS" was accepted. This means that there is no remarkable difference between the scores of no frustration and frustration groups in the Enugu somatization scales ESS. While no frustrations are regarded as individuals that did not report heat in the head-and goal frustration respectively. One would expect that based on the characteristics of the two groups used for the study, a remarkable difference should exist between the scores of no frustration and frustration on the ESS. Since the first hypothesis confirmed the relationship between heat in the head and goal frustration. It was expected that the treatment group (frustration) would experience a higher level of scores than the control group (no frustration). This contradiction between the

observed and the expected may be explained thus; the first hypothesis tested established that people who encounter goal frustration are very likely to experience heat in the head.

Man is a wanting animal and there can never be a point in life when he is not aiming for or working toward something. Based on this no frustration that were presumed goalless may have head other personal needs which could have qualified difference in scores between males and females. Similarly, Ebigbo & Ihezue (1981) in their study examining the developmental conditions of the symptoms of heat in the head observed that were no significant differences in the presentation of symptoms between the male and female groups. However, why accepting the above finding, in this part of Africa in general and Nigeria in particular, it has been suggested that male folk are susceptible to experiencing or manifesting behaviours related to heat in the head, in this case goal frustration than their female counterpart. Using 22 students to examine the developmental conditions of the somatic symptoms Ebigbo & Ihezue (1981) concluded that heat in the head is often used by the melancholic introvert and choleric type of personality, especially men. Furthermore such men were noted to fall within the developmental ages of 17-24 and 25-34 respectively, the prime age when there are high expectations to survive, to enter an institution of higher learning or settle down to a profession and positions of responsibility. Among this group it was observed that those who complained of heat in the head had frustration which gave rise to the symptoms being experienced, Ihezue & Ebigbo pointed out that men are especially vulnerable to goal frustration, especially men within the developmental ages of 17-24 and 25-34. One important fact to note here is that these ages are the prime time when there are high expectations from the society and family for a young man to consolidate his future prospect by entering an institution of higher learning. For example; settle down to a career and position of responsibility or marriage. The key words here are "high expectation" and "Responsibility".

Moreover, in the African society, much importance is attached to the male gender. The reason for this being that males are the one expected to take responsibility for the family. It is therefore expected that males prepare themselves for this position. It is not therefore surprising to observe that males grow up with the ever present knowledge in their sub-conscious that much is expected from them. This provides the drive for goals and achievements amongst the male folk. The fact that such goals and achievements are expected at particular ages, increase the drive for achievement especially at those crucial ages. Hence any form of goal blocking especially during those crucial ages results in goal frustration. For example, the young boy who has written JAMB examination and severally failing to secure an admission into the University or Polytechnic would definitely experience goal frustration; a young man who has successfully completed his higher education on failing to settle down to a career due to lack of job opportunities would experience goal frustration; a man without a means of livelihood enough to raise and sustain a family would invariably experience goal frustration, etc.

These are simple instances of how societal expectations from the male gender at particular ages results in high drive for goals and achievements and therefore an increase in susceptibility to goal blocking and goal frustration. This observation was also in line with the earlier work of Gautam (1976) and Janakiraniah & Koelkar (1981) from which it was stated that there is no significant difference in sex in the presentation of somatic symptom.

In summary, an overview of the hypotheses earlier discussed yielded the following out comes. A remarkable relationship exists between heat in the head and goal frustration. No remarkable difference was observed to exist between the scores of the no frustration and frustration groups in ESS. No remarkable difference was observed to exist between the scores of males and females in the Enugu Somatization Scale.

4.1 Relevance of the Findings

Findings of this study have established the fact that goal frustration is related/linked to heat in the head. This finding would go a long way in resolving part of the mystery surrounding the cause(s) of the somatic illness called heat in the head. This is surely a giant leap in the quest for uncovering of heat in the head syndrome. Obviously, establishing the root causes of heat in the head would go a long way in providing solution in the areas of treatment and management. These findings would also help correct some erroneous impressions people have about somatic illness generally. This study also revealed that certain groups of people are more likely than others to develop this condition described, as heat in the head. This finding would help streamline the efforts of researchers and clinicians alike towards this highly susceptible group in terms of prevention and intervention. Finally, findings from this study would definitely add to the present body of knowledge in the area of somatization, mental health and wellbeing generally.

4.2 Implication of the Findings

Since the first hypotheses tested confirmed the relationship between heat in the head and goal frustration, the implication of this finding is that people who encounter goal blocking are very likely to experience heat in the head. No difference was observed between the scores of no frustration and frustration groups in the ESS. Put the

other way, no frustration and frustration groups are both susceptible to, heat in the head. The implication of this finding is that even the no frustration without pressing goals in sight may also experience heat in the head. In a nutshell this means that people (both no frustration and frustration groups) that reported heat in the head and those that did not may also experience heat in the head for a number of other reasons apart from goal frustration. Thus it follows, that goal frustration is only one of the very many possible causes of heat in the head.

However, the groups of frustration were observed to be more likely to experience goal frustration owing to the presence of a specific goal which they must achieve within a given period of time. The implication is further explained that individuals who fall under the category of abnormal (like infertile women, IMT students, psychiatric patients, SS II and III students) are more likely to experience goal frustration resulting from goal blocking. Meanwhile the third hypothesis tested revealed that there is no remarkable difference between the scores of males and females on the ESS. The implication of this finding is that males and females are equally susceptible- to heat in the head, and there is no difference in the presentation of somatic symptom (like heat in the head) based on sex; even though culture wise, a lot is expected from male folk making them vulnerable and exposing them too to the symptom.

4.3 Summary

The findings of this study are summarized as follow: A significant positive relationship was observed to exist between heat in the head and goal frustration. A non-remarkable difference was also found to exist between the scores of no frustration and frustration groups on the ESS, A non-remarkable difference was observed to exist between the scores of males and females on the ESS.

4.4 Conclusion

Based on the- findings of this study, the researcher hereby concludes that goal frustration is relatively related to heat in the head. The no frustration and frustration groups, those with heat in the head and those without heat in the head are vulnerable but the frustration are more susceptible to experiencing heat in the head resulting from goal blockage. Then, males and females manifest somatic symptoms and in this case heat in the head, in the same dimension, although men are more likely to complain of goal frustration due to cultural concomitants. Behind individuals with heat in the head are other possible underlying symptoms that need attention.

4.5 Recommendations

Findings of the study should be made public and presented in lectures and seminars on somatization. Since many people are still in the dark as far as the case of heat in the head is concerned, educating them on the causes of heat in the head (of which goal frustration is one) and how relationship between the two variables work would help in the prevention of the occurrence of heat in the head and possibly suggest ways of handling or treating this condition.

4.6. Limitations of Study

1. Sample size, researcher would have loved to sample- enough sample size in order to enhance external validity and generalization of the findings to the population.
2. Not many persons would like to report medical case until the medical problem makes them incapable of moving about or adjusting to their work and life style. African patients usually channel that psychological distress into somatic complaints and thereby prevented from emptying into the symptoms of a full fledged mental break down. They cannot afford to break down, since he/she would run into problem of leaving his or her responsibility, forcing them to cope with somatic distress for a long time (Ebigbo, 1982). This basically explains why few respondents were sampled at the time of the study.

References

- [1] Abudu F. (1986). Work Attitudes of Africans with Special Reference to, Nigeria. *International Studies of Management Organization* 16(12) 12-36.
- [2] American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed. Washington, DC.
- [3] Ayorinde A. (1977) Heat in the Head or Body a Somatic Confusion. *Africa Journal Psychiatry*.
- [4] Collomb, H and Zwingelstaiah J. (1961). *Depressive State in African Community*. First African Psychiatric Conference Abeokuta Nigeria 12-18 Nov. 1961 Edited by T.A Lambo, Government Printer Ibadan. pp.227-334.
- [5] Cvonbach, L. (1997) Aptitudes and instruction method, New York Irvington.
- [6] Deveraux, G. (1977). Culture and Symptomatology. In Boruffka A. and Pfeiffer, W.M. *Fragernder transcultures, Vergleich Henden Psychiatric in Europa; West Failische Whihelus Uniseritact Muenster Franch Medizinische Psychologies Muenster pp. 20-23.*

- [7] Ebigbo P.O (1986). A Cross-Sectional Study of Nigeria Females using the Enugu Somatization Scale, *Culture, medicine and psychiatry* 10:167-86.
- [8] Ebigbo, P.O (1984). *Nigerian Workers and Somatization*: In Ejiofor, P. N.O. Aniagolu, V. A., Managing the Nigeria Worker Ibadan: Longman Nigeria, pp. 62-65,
- [9] Ebigbo P.O (1982). Development of Culture Specific (Nigeria) Screening Scale of Somatic Complaints Indicating Psychiatric Disturbance, *Culture, Medicine and Psychiatry* 6, 29-43.
- [10] Ebigbo P.O and Ihezue U.H. (1981a). Psychodynamic Observations of the Symptom of Heat in the Head *Africa Journal Psychiatry*, 7, 1 and 2 25-30.
- [11] Ebigbo P.O and Ihezue U.H. (1981b). Ameisenkribbeln (Crawling Sensation) Kann Ver Draengte Sexualitaet Keorperlicher Beschwerden Verursachen. *Sexual Medizin*, 10;402-404.
- [12] Ebigbo P.O and Ihezue U.H. (1982). Uncertainty in the use of Western Diagnostic Illness Categories, for Labeling Mental Illness in Nigeria. *Psychopathologic Africaine xviii*, 1, 59-74.
- [13] Ebigbo P.O and Obiako M.N (1984). Heat in the Head among Nigeria. *Nigeria Journal of Clinical Psychology*. 13, (Nos 1 and 2) pp 97-110.
- [14] Gautam, S.K (1976). *A Comprehensive Study of Patients Presenting with Somatic Symptoms*. Dissertation Bangalore University.
- [15] Gunthrie, G.M., et al (1975). Symptoms of Stress in four Societies. *The Journal of Social Psychology*. 95:165-172.
- [16] Igbokwe D.O (2003) Assessing and curbing somatization and Neurotic illness among street children in Enugu urban. Nigerian Association of clinical psychologists (NACP) 2003 conference. Printed by Bill Fred (Nig) Ltd, Owerri Imo State.
- [17] Janakiramaiah, N. and Subbakishna, O.K. (1980), Somatic Neurons in Muslim Women in India, *Social Psychiatry*, 15, 203-206.
- [18] Janakiramaiah, N. and Kollar, D. (1981). Neurotic Illness Questionnaire: A Brief Report: *Indian Journal of Psychological Medicine*, p.33-38.
- [19] Kumaraswamy, N. and Ebigbo, P.O. (1984). Preliminary Investigation in, the Mental Health of Preclinical Students. *Nigeria Journal of Clinical Psychology* 5(Nos. 1 and2) p.22
- [20] Leighton et al, (1963). *Psychiatric Disorder among the Yoruba*. Cornell University Press Ithala.
- [21] Mbanefo S.E (1966). Heat in the Body as a Psychiatric Symptom. *Journal Coll Gen practice* 11, 235.
- [22] Okhomina, F.O.A and Ebie, J.C (1973). Heat in the Head as a Psychiatric Symptom. 4th Pan-African Workshop, Accra, Ghana.
- [23] Pfeiffer, W. (1978). Transkulturelle, Aspecte Pathologischen Verhaltens, in Handbuch der Psychologies, LJ Pongratz (Ed.) Band, 2 Halbband: 2145-3171.
- [24] Trandis, H.C and Draguns J.G. (1980). *Handbook of Cross Cultural Psychology* Vol.6. *Psychopathology*, Boston: Allyn and Bacon.
- [25] Uzoka, A.F. (1998). *Choice, Responsibility and Freedom: Essentials of Managerial Effectiveness*: Paper Presented at the Management Workshop for Deans of Faculties, Directors and Heads of Departments. Nnamdi Azikiwe University Awka, Anambra State, October. Emma, K. M., Nadia, G.,W. A. G.,& Rien van der, L.,(2009). Daily Frustration, Cognitive Coping and Coping Efficacy in Adolescent Headache: A Daily Diary Study *Headache*,49,1198-1205.
- [26] Massey, E.K., Garnefski, N. & Gebhardt, W.A(2008). Goal frustration, coping and well-being in the context of adolescent headache: A self-regulation approach. *European Journal of Pain*,87-166.
- [27] Holm, J.E, Lokken, C, Myers, T.C.(1997). Migraine and stress: A daily examination of temporal relationships in women migraineurs. *Headache*.37,553-558.
- [28] Spierings, E.L.H, Sorbi, M.J, Haimowitz, B.R, Tellegen, B.(1996) Changes in daily hassles, mood and sleep in the 2 days before a migraine headache. *Clinical Journal Pain*,12,38-42.
- [29] Benedittis, G,& Lorenzetti, A.(1992). The role of stressful life events in the persistence of primary headache: Major events vs. Daily hassles. *Pain*.51,35- 42.
- [30] Fernandez, E, Sheffield, J.(1996). Relative contributions of life events versus daily hassles to the frequency and intensity of headaches. *Headache*.36,595-602.
- [31] Passchier, J, Orlebeke,J.F.(1985). Headaches and stress in schoolchildren: An epidemiological study. *Cephalalgia*,5,167-176.
- [32] Sundblad, G.B, Jansson, A, Saartok, T, Renström, P,& Engström L-M.(2008) Self-related pain and perceived health in relation to stress and physical activity among school- students: A 3-year follow-up. *Pain*.136,239-249.

- [33] Walker, L.S, Garber, J, Smith, C.A, van Slyke, D.V,& Claar, R.L.(2001).The relation of daily stressors to somatic and emotional symptoms in children with and without recurrent abdominal pain. *J Consult Clinical Psychology*.69,85-91.
- [34] Gil ,K.M.,Carson, J.W,& Porter, L.S.(2003). Daily stress and mood and their association with pain, health-care use, and school activity in adolescents with sickle cell disease. *Journal Pediatric Psychology*,28,363-373.
- [35] White, K.S, & Farrell, A.D(2006) Anxiety and psychosocial stress as predictors of headache and abdominal pain in urban early adolescents. *Journal Pediatric Psychology*,31,582-596.
- [36] Van den Bree, M.B.M., Passchier, J,& Emmen, H.H.(1990). Influence of quality of life and stress coping behaviour on headaches in adolescent male students: An explorative study. *Headache*.30,165-168.
- [37] Brosschot, J.F, & van der Doef, M.(2006). Daily worrying and somatic health complaints: Testing the effectiveness of a simple worry reduction intervention. *Psychology Health*. 21,19- 31.
- [38] Thomsen, D.K, Mehlsen, M.Y,& Olesen ,F.(2004). Is there an association between rumination and selfreported physical health? A one-year follow-up in a 1204 September 2009 young and elderly sample. *Journal of Behavioural Medicine* 27,215-231.
- [39] Keefe ,F.J., Lumley, M., Anderson, T, Lynch, T.,& Carson, K.L(2001). Pain and emotion: New research directions. *Journal Clinical Psychology*,57,587-607.
- [40] Keefe, F.J., Affleck, G., Lefebvre, J.C., Starr, K., Caldwell, D.S.,& Tennen, H.(1997). Pain coping strategies and coping efficacy in rheumatoid arthritis: A daily process analysis. *Pain*.69, 35-42.