



# Enugu State University of Science & Technology Journal of Social Sciences



## Journal of Social Sciences

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published by

Faculty of Social Sciences  
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## **Influence of Locus of Control and Emotional Intelligence on the Health Seeking Behaviour of Hypertensive Patients in Enugu Urban**

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### **Abstract**

*This study investigated the influence of locus of control and emotional intelligence on health seeking behaviour of hypertensives in Enugu, urban. One hundred and twenty-four participants comprising 72 males and 52 females between the ages of 40 to 79 years ( $M=60.19$ ,  $SD=12.07$ ) were used in the study. They were sampled, using Multi-stage sampling technique (cluster and odd-even sampling techniques). Three instruments were used in data collection, namely; Wallston, Wallston and Devellis (1978) 18- items multidimensional Health Locus of control, Bastool (2009) 56-item emotional intelligence scale and Osama (2003) 30-item health-seeking behaviour scale. A cross-sectional survey design was adopted while 2 x 2 ANOVA with unequal sample size was applied in statistical analysis. The results revealed that locus of control showed a significant influence on poor health seeking behaviour of hypertensives. ( $F(1,120)=12.81$ ,  $P<.001$ ) while emotional intelligence revealed no significant influence ( $F(1,120)=7.49$ ,  $P>.007$ ). However, a significant interaction was observed. ( $F(1,120)=3.92$ ,  $P<.05$ ). The internals (62%) were reportedly engaged in health-related behaviours more than the externals (37%). It was concluded that locus of control had significant influence on the poor health seeking behaviour of hypertensives. It was also observed that the high emotional intelligent, were less involved in health compromising behaviours whereas the low emotional intelligent were more prone to compromise to health damaging behaviours, hence poor health seeking behaviour. It correlated with health seeking behaviour but had no influence on the hypertensive poor health seeking behaviour.*

**Keywords:** Locus of control, emotional intelligence, Health seeking behaviour, hypertensive

### **Introduction**

Hypertension is a common and major public health problem associated with a high level cardiovascular morbidity and mortality worldwide (Lim, Vos, Flaxman, Danaei, Shibuya, Adair-Rohani, & Aryee, 2013). It remains the major risk factor for heart failure in Nigeria (Ogah, Okpechi, Chukwuonye, Akinyemi, Onwubere, Falase, & Sliwa, 2012). Hypertension (also known as high blood pressure) occurs when the blood pressure is consistently higher than 140 over 90 mmHg (millimeter mercury) when measured with sphygmomanometer (World Health Organization, 2004). According to American Heart Association (2006) normal blood pressure is below 120 systolic and below 70 diastolic, pre-hypertension is 120-139 systolic or 80-89 diastolic, stage 1 high blood pressure (hypertension) is 140-159 systolic or 90-99 diastolic, stage 2 high blood pressure (hypertension) is 160 or 100 or higher diastolic and hypertensive crisis ( a medical emergency ) is when the blood pressure is above 180 systolic or above 110 diastolic. Generally, hypertension is symptomless except when complication has set in, that is when moderate to severe symptoms appear. Hypertension is characterized by severe headache, fatigue, confusion, visual problems, chest pain, difficulties

in breathing, insomnia, irregular heartbeat, protein in urine (proteuria), pounding in the chest, neck or ears and it can lead to complications and damages such as heart attack and kidney failure.

Abdullahi and Amzat (2011) declared that more than 11% of Nigerian adults are living with the illness. A recent community based study of rural and semi urban population in Enugu reported that the prevalence rate of hypertension in Nigeria at 32.68% (Ulasi, Ijeoma, & Onodugo, 2010) with working class adults constituting the main risk group. Despite the prevalence of and effects, Omuewu, Okejie and Omuewu (2008) found low level of awareness of hypertension globally. The level of detection treatment and control of hypertension is one of the issues usually considered in dealing with perception and practice of regular blood pressure monitoring. In Nigeria, awareness is poor as only 33.8% of hypertensive are aware of their blood pressure condition, inspite of the fact that it has devastating consequences. (Familoni, 2002; Akinkugbe, 2003; Kadiri, 2005). Generally, health-related behavior involves a variety of behavior patterns, actions and habits which bear relevance to health maintenance, restoration, or improvement (Gochman, 1988). Various factors have been reported to be associated with preventive and risky health-related behavior, including socioeconomic status, personality, emotional and cognitive factors (Sutton, Bickler, Sancho-Adrige & Saidi, 1994).

However, health seeking behavior is activity engaged in by people that has impact on their health status (Kasl & Cobb, 1966). Health seeking behavior is a very strong factor in health or illness and the quality of health of individual or even a nation depends to a reasonable extent on the intensity of health-seeking behavior (Omeje, 2012).

Among the many factors that have been associated with health seeking behavior is a person's locus of control. This was originally developed within the framework of Rotter's (1954) social learning theory. The locus of control construct refers to the degree to which an individual believes the occurrence of reinforcement is contingent on his or her own behavior. The factors involved with reinforcement expectancy are labeled "external" and "internal" control. As a general principle, the locus of control variable may be thought of as affecting behavior as a function of expectancy and reinforcement within a specific situation (Carlise-Frank, 1991). Personality constructs like the locus of control (LoC) can influence health behavior and impact on illness and treatment (Singh, 2011). Furthermore LoC concept which stems from Rotter's social learning theory, (Lynam, Catley, Goggin, Rabinowitz, Gerkovich, Williams & Wright, 2009), posits that individuals can be differentiated in terms of their internal or external sources of control. People with an internal LoC take responsibility and decision without any form of influence from the external world. Studies have shown that internally-driven people are more likely to adhere to prescribed treatment regimens because they believe in their ability to influence their health (Burkhart & Rayens, 2005; Omeje & Nebo, 2011). Conversely individuals with external LoC assign their experiences to forces in the outer world such as chance, fate or other people. Externally-driven people are thought to be less likely to adhere to therapy because of their belief that their actions may not

appreciably affect health outcomes (Halimi, Pry, Pithon, Godard, Varrin & Chanez 2010; Combes & Feral, 2011).

Emotional intelligence is the ability to perceive emotions, and the ability to manage self-relevant emotion and to manage other's emotion in a socially acceptable way (Ciarrochi, Chan & Caputi, 2000). It involves an interaction between emotion and cognition in such a way that it leads to adaptive functioning (Salovey & Grewal, 2005). Emotional intelligence has been shown to influence people's behavior including health-seeking behavior (Ciarrochi et al, 2000). People high in emotional intelligence tend to have more sources of social support from extended family and friends and thus have more opportunities for seeking health-related information (Ciarrochi et al, 2000). The highly emotional intelligence people are more likely to recognize when they are distressed which could lead to health-seeking behavior. Finally they are likely to have better skills at managing the emotions of others which increases the probability that their health-seeking behavior will be more successful in engendering an appropriate care or help response. In other words, locus of control and emotional intelligence seems to be among the factors that influence health-seeking behavior hence the present study explored these relationship among hypertensive in Igbo culture, since most of the studies were done in the western cultures.

### **Theoretical overview**

All the theories reviewed have contributed immensely to the understanding of the influence of locus of control and emotional intelligence on health seeking behaviour among hypertensive patients. For instance, in health seeking behavior, Health belief theory posited that one has to consider certain factors before engaging in health-seeking behaviour, such factors as susceptibility, severity benefits and barriers. Protection motivation Theory posited that people engage in behaviour such as health-seeking behaviour because of motivation to protect oneself against a health threat. Self-efficacy theory maintained that the determinants of behaviour such as health-seeking behaviour are perceived self-efficacy and outcome expectancies, hence, portraying the persons as being in control of his/her health-seeking behaviours. The self-regulatory theory maintained that information is the key in determining how far someone can fare in behaviour such as health-seeking behaviour. On the part of locus of control, attribution theory states that individuals formulate attribution in understanding, predicting and controlling their environment as well as in explaining it. Social learning theory maintained that learning is the key to engaging in any given behaviour such as health-seeking behaving and also in determining emotional intelligence. Also, in Emotional intelligence, Ability theory explained the importance of ability in emotional intelligence. Trait Theory opined that emotional intelligence dwells with personality which is an enduring trait that will help one to behave well in the face of tough situations. However, among these theories, the theory of reasoned actions which holds that health seeking behaviour depends on behavioural intent, attitudes, beliefs and evaluations of behavioural outcomes, subjective norms and normative beliefs. Thus the study will be anchored on this theory. In addition the empirical studies have consistently shown that people with internal locus of control engaged more in health-seeking behaviour than externals. And high emotional intelligence linked with health-

seeking behaviour. However, most of these findings have been drawn from studies conducted in Europe and United States of America with little if not none from Africa especially Nigeria. Moreover, these studies focused on locus of control and emotional intelligence on health-seeking behaviour in relation to other diseases without any on hypertension and hypertensive patients, hence the need for this present study in part if not in whole to bridge the gap created by the dearth of empirical evidence on the influence of locus of control and emotional intelligence on health-seeking behavior of hypertensives in this part of the world.

## **Method**

### **Participants**

A total of 124 participants comprising 72 males and 52 females between the ages of 40 to 79 years ( $M = 60.19$ ,  $SD = 12.07$ ) were sampled from the population of hypertensive patients (whose blood pressure is consistently higher than 140 over 90mmHg millimeters of mercury) who attend clinic and receive medication (hypertensive drugs) from University of Nigeria Teaching Hospital Enugu State, University of Science and Technology Hospital Enugu using multi-stage sampling technique (cluster and odd-even sampling techniques).

### **Instruments**

Three instruments were used in this study namely: Wallston, Wallston and Devellis (1978) 18-item Multidimensional Health Locus of Control, Bastool (2009) 56-item Emotional Intelligence Scale and Osama(2003) 30-item Health-Seeking Behaviour Scale.

#### **Multidimensional Health Locus of Control (Form A)**

The Multidimensional Hloc scale is an 18-item self-report questionnaire developed by Wallston, Wallston and Devellis (1978) designed to assess an individual's preferred control orientation with respect to health. Scores were obtained for three dimensions of Hloc: internal, chance and powerful others. The powerful others items specified others to be primarily health professionals. Scale scores were obtained by summing across items associated with those subscale appropriate for Form A as identified by Wallston, Wallston and Devellis (1978). The Score on each subscale is the sum of the values circled for each item on the subscale (i.e. where 1= "strongly disagree" and 6= "strongly agree"). The estimated reliability was 0.74 for internal Hloc, 0.66 for chance Hloc and 0.72 for powerful others Hloc. The researcher carried out a pilot study to determine internal consistent and factor analysis of items using 87 participants from Anambra State University Teaching Hospital, Awka. The outcome showed that item components were above 50 a reliability coefficient of Alpha 0.62.

#### **Emotional Intelligence Scale (Bastool, 2009)**

Bastool (2009) 56-item emotional intelligence scale was used in measuring the emotional intelligence of the participants. This scale measures the ability the ability of an individual to understand his or her emotions and that of others for effective interpersonal interaction.



**Scoring :** The scale has four point likert- type response format of Always= 4, often =3 , sometimes= 2 and never =1, Ten -items(7,9,13,17,26,30,42,47,48 and 49) have reverse scoring while the remaining have direct scoring. The highest score in the Emotional Intelligence scale was 194 and the lowest score was 140. Bastool (2009) reported cronbach Alpha of 0.95 and split-half reliability of 0.92 for the scale. Ifeoma (2015) reported cronbach Alpha of 0.73 and split -half reliability of 0.77 Ifeonu (2015) also correlated Bastool (2009) 56-item emotional intelligence scores with Eysenck (1991) general intelligence scores and obtained coefficient value of 0.30 this helped to establish the convergent validity of Bastool (2009) emotional intelligence scale.

### **Health - Seeking Behaviour Questionnaire**

Osama (2003) 30-item health seeking behaviour questionnaire was used in measuring health - seeking behaviour of the participants. The instrument has five response options ranging from 5 (always), 4(often),3(sometimes),2 (fairly) to1(Never). A highest possible score of 150 and lowest possible score of 30 can be obtained at any given time. Scores in the range of 30-90 indicate low health seeking behaviour which scores higher than 90 indicate high health-seeking behavior. Osama (2003) reported split-half reliability of 0.67 and Spearman Brown correlated coefficient of 0.80. He also reported intrinsic validity of 0.89 for the questionnaire.

### **Procedure**

First, the researcher obtained letter of introduction from the Head of Department of Psychology, which I took to the Chief Medical Director of the hospitals where the participants were sampled. Secondly, the researcher formally wrote the Chief Medical Directors of University of Nigeria Teaching Hospital and Enugu State University of Science and Technology Teaching Hospital. This application and letter of introduction enabled the researcher obtain an approval from the management of these hospitals to use their hypertensive patients as participants for the study. Upon approval, the researchers divided the two hospitals into two clusters. In each cluster (hospital), the researcher with assistance of the medical doctors, nurses and other health personnel made use of the attendance register of hypertensive patients who attended clinic for check-up. The researcher using odd-even sampling technique picked only the patients whose name fall within the odd numbers. These sampled participants were given 144 copies of the questionnaires measuring health locus of control, emotional intelligence and health-seeking behavior. They were instructed to go home with these questionnaires, read them carefully, complete them and return them the next checkup date. These were the procedure in the two clusters. However, 124 copies of the questionnaire properly completed and returned were used for data analysis and testing of the hypothesis.

### **Design/Statistics**

Cross-sectional survey design was used. A cross-sectional survey design is used to collect data to make inferences about a population of interest at one point in time (Golberg, 1992) and it is a snapshot of the population under study (Ellis, 1998). Two-way analysis of variance

of test was also used as a statistical test for data analysis because of the two independent factors (Locus of control and emotional intelligence) each with two levels on one dependent factor (health-seeking behavior). Two-way analysis of variance F-test enabled the researcher assess the main effect of each independent variables on the dependent variable (George, 2008).

## Results

**Table I:** Summary table of means on influence of locus of control and emotional intelligence on health-seeking behaviour of hypertensive patients.

| Health Locus of Control | Emotional Intelligence | Mean         | N          |
|-------------------------|------------------------|--------------|------------|
| Internal HLOC           | Low EI                 | 97.87        | 38         |
|                         | High EI                | 99.39        | 31         |
|                         | <b>Total</b>           | <b>98.55</b> | <b>69</b>  |
| External HLOC           | Low EI                 | 92.21        | 24         |
|                         | High EI                | 96.71        | 31         |
|                         | <b>Total</b>           | <b>94.75</b> | <b>55</b>  |
| Total                   | Low EI                 | 95.68        | 62         |
|                         | High EI                | 98.05        | 62         |
|                         | <b>Total</b>           | <b>96.86</b> | <b>124</b> |

Dependent Variable: Health-Seeking Behaviour

From the table I above hypertensive patients with internal health locus of control (HLOC) obtained a total mean of ( $X = 98.55$ ) while those with external HLOC obtained a total mean of ( $X = 94.75$ ). On the same note, hypertensive patients with high emotional intelligence (EI) obtained a total mean of ( $X = 98.04$ ) while those with low EI obtained a total mean of ( $X = 95.68$ ).

Regarding the stated hypotheses, internal HLOC hypertensive patients with high EI obtained the highest group mean of ( $X = 99.39$ ) followed by internal HLOC hypertensive patients with low EI of ( $X = 97.87$ ) and external HLOC hypertensive patients with high EI of ( $X = 96.71$ ) and external HLOC hypertensive patients with low EI with the lowest group mean of ( $X = 92.21$ ). Thus, a high mean indicates high health-seeking behaviour while a low mean indicates low health-seeking behaviour. So, a mean above the norm (90.00) was the basis for adjudging a participant's degree of engagement in health-seeking behaviour.

Therefore, hypertensive patients irrespective of their locus of control and emotional intelligence showed a relatively high degree of engagement in health seeking behaviour. Hence, hypertensive patients engaged in health-seeking behaviour.

**Table II:** Summary table of Two-way ANOVA on influence of locus of control and emotional intelligence on health-seeking behaviour of hypertensive patients.

| Source   | Type III Sum of Squares | df  | Mean Square | F         | Sig. |
|--|-------------------------|-----|-------------|-----------|------|
| Corrected Model                                  | 756.627 <sup>a</sup>    | 3   | 252.209     | 2.502     | .063 |
| Intercept  | 1125521.408             | 1   | 1125521.408 | 11165.848 | .000 |
| Health Locus of Control                          | 524.640                 | 1   | 524.640     | 5.205     | .024 |
| Emotional Intelligence                           | 273.517                 | 1   | 273.517     | 2.713     | .102 |
| Health Locus of Control * Emotional Intelligence | 67.143                  | 1   | 67.143      | .666      | .416 |
| Error  | 12096.042               | 120 | 100.800     |           |      |
| Total  | 1176273.000             | 124 |             |           |      |
| Corrected Total                                  | 12852.669               | 123 |             |           |      |

Dependent Variable :Health-seeking Behaviour

a. R Squared = .059 (Adjusted R Squared = .035)

b. Computed using alpha = .05

From table II above, calculated value of  $F(1,120) = 5.21$ ,  $p < .02$  level of significance, revealed a significant influence of Health Locus of Control on hypertensive patients health-seeking behaviour. This indicated that locus of control of hypertensive patients had remarkable influence on their high health-seeking behaviour. Meaning that, high health-seeking behaviour of hypertensive patients anchored on their locus of control whether internal or external.

Also, calculated value of  $F(1,120) = 2.71$ ,  $p > .10$  level of significance, showed no remarkable influence of emotional intelligence on hypertensive patients health seeking behaviour. This indicated that hypertensive patients' low EI or high EI had no influence on their high health-seeking behaviour, as there is no remarkable difference. Meaning that, the EI of hypertensive patients, whether low or high had nothing to do with their high degree of health-seeking behaviour.

More so, there was no significant interaction effect of locus of control and emotional intelligence of hypertensive patients of  $F(1,120) = .67$ ,  $p > .42$  level of significance.



## Discussion

In this study it is clear that every hypertensive patient engaged in health-seeking behavior. The first hypothesis tested which tested that locus of control will not significantly influence health-seeking behavior was rejected or disconfirmed in as much as every one sought healthy behavior, both the internal and external locus of control. The above outcome agreed with Rotter's theory of locus of control (Rotter, 1996), and with some studies by Strickland (1978), Ed Lau and Ware (1981), who found that locus of control correlates with health-seeking behavior.

The outcome of this study was not surprising; this is because people in this part of the world always look at things from different perspective especially when it pertains to their health. They are quick in forming opinions regarding the events in their life which could be either internal or external in locus of control, depending on the background of the person.

Also the second hypothesis was stated that, "emotional intelligence will not significantly influence health-seeking behavior of hypertensive patients was not confirmed." This indicated that emotional intelligence had no significant influence, on hypertensive patient's high degree of health-seeking behavior. This is to say that emotional intelligence as a factor had nothing to do with the relatively high degree of health-seeking behavior of hypertensive patients. This outcome disagreed with earlier studies for instance (Schutte et al, 2007; Cameron & Nicholas, 1998, Pennebaker et al., 1988; King & Miner, 2000) that emotional intelligence has been effective in promoting health-seeking behaviors.

However, the non-remarkable influence of emotional intelligence on health seeking behavior was surprising. This is because being emotionally intelligent according to Baron (2002) focuses on array of emotional and social abilities including the ability to be aware of, understanding and expressing oneself, the ability to relate to others the ability to deal with strong emotions, and the ability to adapt to change and solve problems of social or personal nature.

## Limitation of study

A research of this nature cannot evade shortcomings. The followings were challenges and hindrances that posed threat to the outcomes of this study. Findings of these studies however, cannot be generalized to national level since the study sample is confined to a limited geographical area. Finally, time constraints as well as financial handicap which prevented the researcher from expanding the scope and sampling area for this study, hence the study was limited to only two government hospitals in Enugu urban.

## Summary and Conclusion

The outcomes of this study showed that; locus of control as a factor had significant influence on hypertensive patient's high degree of health-seeking behavior. Emotional intelligence as a factor on the other hand had no remarkable influence on hypertensive patient's high degree of health-seeking behavior. Therefore, from the outcomes of this study, health-seeking behavior

being a vital aspect of staying healthy when it is adequately adhered to, could be an advantage to the patient, care giver and other concerned persons. Therefore, psychologist and health-care providers will keep on encouraging patients to maintain their health-seeking behavior by maintaining a healthy life pattern. It is also concluded that people should be internally oriented in their approaches to issues, especially when it pertains to health matters.

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