

Influence of Locus of Control on Students' Illness Behaviour in OgunState, Nigeria

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Abstract The study addresses the issue of illness behaviour from the psychological perspectives, focusing on the predictive role of locus of control on expression of illness behaviour. A survey method was adopted and one hundred and seventy (170) undergraduates from the Redeemer's University with mean age of eighteen (18) participated in the study. Data were collected using Nowicki- Strickland Locus of Control (N-SLSCS) and Illness Behaviour Questionnaire (IBQ). The collected data were processed using descriptive and inferential statistics such as mean, standard deviation, independent t-test and linear regression. The results show that participants' locus of control contributed twenty one percent (21%) to variance in illness behavior and the participants classified as having internals locus of control reported significantly different illness behaviour when compared to their counterparts classified as having external locus of control. The study concluded that locus of control plays a significant role in explaining different manifestations of illness behaviour. The implication of the study in terms of administering drugs and substances to patients by the health practitioners were discussed.

Keywords Locus of Control, Illness Behaviour, Adolescents

1. Introduction

The beliefs human beings hold about their lives directly or indirectly affects their health status. Thus, the study of illness behaviour aims at gaining new insight into and advancing understanding of beliefs and behaviours that have major impact on health and well-being of students as well as contribute to the development of interventions that promote healthy lifestyles.

Illness behaviour is defined as the ways in which given symptoms are perceived, evaluated and acted upon (or not acted upon) by different kinds of persons(1). Illness behaviour refers to those behaviours that individuals engage in once they believe that they are ill (2).

Being ill can be regarded as an active and not a passive state, in that it involves the individual and others interpreting their symptoms, choosing what to do about their experience of illness and finally deciding what course of action to take in response to the symptoms (3, 4).

Some researchers have noted that abnormal Illness behaviour consist of people with bodily symptoms for which no adequate organic cause can be found and those who deny the presence of disease which is obvious to others (1, 5, 6,). Thus, the individual cognition and perception of the situation and symptoms influence his or her health or illness

behaviour.

The psychological assessment of illness behaviour is therefore the understanding of behaviour in its social context that involves individuals' perception, evaluation and action toward the symptoms rather than in relation to a physiological or pathological condition. In other words, human beings respond to symptoms based on their psychological make-up. Thus, the need to understand the psychological perspectives of human being as it relates to illness behavior because people could ascribe the causes of their good or ill health to internal or external factors or control. Studies have shown that there is a connection between locus to control and behaviour patterns in a number of different areas (7).

The concept of locus of control is a dimension of personality that explains individuals' perception of responsibility for the action or situation (8). A person with internal locus of control often takes responsibility of the situation and exercise possible control whereas people with external locus of control often see themselves as victims of environmental factors, as a result he or she resolves to learned helplessness behaviour.

Furthermore, Individuals with internal locus of control are inclined to take responsibility for their actions, are not easily influenced by the opinions of others, and tend to do better at tasks when they can work at their own pace. By comparison, people with an external locus of control tend to blame outside circumstances for their mistakes and credit their successes to luck rather than to their own efforts. They are readily influenced by the opinions of others and are more

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likely to pay attention to the status of the opinion holder, while people with an internal locus of control pay more attention to the content of the opinion regardless of who holds it.

This study examines two different models that explain different dimensions of behaviour people manifest when they perceive or experience illness. They are:

The biopsychosocial models and Social learning theory.

a) The biopsychosocial model of illness behaviour was postulated by Engel (10) to integrate the biological, psychological and social dimensions of individual's experience. This illness-behaviour model considers the biological, psychological and social context to be important dimensions in determining human behaviour in health and illness. Each dimension is considered to be equally important and the model emphasizes the interaction between these dimensions. The biopsychosocial model infers that general psychological factors are important to the central process in the illness behaviour model.

b) The social learning theory as proposed by Rotter focuses on people's deep-seated instinctual motives as determinant of behaviour (12). In developing social learning theory, Rotter chose the empirical law of effect as his premises. The law of effect states that people are motivated to seek out positive stimulation, or reinforcement, and to avoid unpleasant stimulation. Rotter combined behaviourism and the study of personality, without relying on physiological instincts or drives as a motive force. The main idea in the social learning theory is that personality represents an interaction of the individuals with his or her environment. Rotter described personality as a relatively stable set of potentials for responding to situations in a particular way.

Empirical research findings have shown that there are significant differences between internals and externals: that Internals are more likely to work for achievements, to tolerate delays in rewards and to plan for long-term goals, whereas externals are more likely to lower their goals. After failing task, internals re-evaluate future performances and lower their expectations of success, whereas externals may raise their expectations

It has been noted that illness behaviour is neither normal nor abnormal. On the other hand, some illness behaviours are clearly less appropriate, or less adaptive, than others (9). Thus illness behaviour simply is the way symptoms are perceived, evaluated, and acted upon by the patient

They examined the relationship between ethnicity and illness behaviour. The results of a three-way analysis of variance (ethnicity, age and sex) indicated that Greek patients were significantly more likely to differ from their Anglo-Saxon counterparts on the initial 3 IBQ scales. Compared with the Anglo-Saxon group, the Greek sample showed greater hypochondriacal concern, was more likely to manifest conviction as to the presence of serious physical disease, and took a more somatic view of illness. It was also found that relationships observed between ethnicity and illness behaviour were to some extent dependent upon age

and sex (9)

A further study was carried out to examine characteristics of illness behaviour and the association between illness behaviour and psychosocial and clinical variables among asymptomatic HIV infected subjects. The results showed that psychological morbidity was associated with a pattern of illness behaviour characterized by conviction of disease progression, irritability, dysphoria, psychological perception of illness and low denial. Individual capacity to express emotions, adequate levels of social support and low levels of depression, as well as clinical variable influenced more adaptive illness behaviour (10).

Furthermore, another study examined the characteristics and quality of illness behaviour in celiac disease (11). The results noted that celiac disease may be associated with changes in personality that may interfere with patient's adaptation to living with a chronic disease.

The reviewed theories and empirical studies hold different perspectives about predictors of illness behaviour. However it was done using patients but this present study is designed to examine illness behaviour among healthy participants with the aim of determining the role of their locus of control on their behaviour.

The following hypotheses are tested in this study:

1. Locus of control will predict a significant difference in the way participants respond to symptoms and actual illness.
2. Participants classified as having internal locus of control will manifest significantly different illness behaviour than their counterparts classified as externals.

2. Method

2.1. Research Design

The survey research design was adopted and two psychological tests were used in collecting data from the participants.

2.2. Participants

The participants for this study were one hundred and seventy (170) undergraduates randomly selected from Redeemer's University in Ogun State, Nigeria. These participants consisted of males and females (M=90; F=80) with age range of 15-30 years and the mean age of 18 years.

2.3. Instruments

The research instruments for the collections of data were Illness Behaviour Questionnaire (IBQ) and Nowicki-Strickland Locus of Control Scale (LOC).

The Illness Behaviour Questionnaire (IBQ) was developed to measure self-perceived manifestation of physical and mental illness, somatization disorder, hypochondriasis and conversion disorder. The authors provided the original psychometric properties (12). A 12-week test-retest reliability for the IBQ scales ranges from 67-85, and the concurrent validity coefficient of 0.21

between IBQ and Stressor checklist-90R.

The Nowicki-Strickland Locus of Control Scale (LOC) was developed by Nowicki and Strickland. A 40 item inventory to assess which individual has internal or external Locus of Control. The authors provided the original psychometric properties (12). The authors reported a six weeks test-retest reliability coefficient of 0.63, 0.66, 0.71 for students respectively and obtained a concurrent validity of 0.25 by correlating N-SLCS with Index of Self-Esteem (ISE).

2.4. Procedure

The participants in the study were given the questionnaires in groups by the researchers after establishing adequate rapport with them. The respondents were made to understand that there is no right or wrong answer; hence they should be free to pick the correct option as applicable to them as individuals. The duly completed questionnaires were collected back from the participants after the exercise.

2.5. Data Analysis

The data collected were analyzed by Regression analysis and independent t-test all are in Statistics Package for Social Sciences (SPSS) Version 16.

3. Results

The results of the analyses are as follow:

Table 1. Standard Regression Analysis of Locus of Control on Illness Behaviour

| variable | Beta | t | R | R ² | F | p |
|----------|------|------|------|----------------|-------|-------|
| LOC | 0.46 | 6.68 | 0.46 | 0.21 | 44.68 | <0.05 |

The result above shows that locus of control contributed 21% in predicting illness behaviour variance.

Table 2. Summary of t-test of different groups of Locus of Control on Illness Behaviour

| variables | N | Mean | S.D | df | t | p |
|-----------|----|------|------|-----|------|------|
| Internal | 85 | 8.19 | 3.09 | 168 | 4.35 | 0.05 |
| External | 85 | 7.77 | 3.40 | | | |

The results in Table 2 above show that participants classified as internals had a higher mean score (\bar{x}) = 8.19 than their external counterparts with mean score = 7.77. There is significant difference between internals and externals with $df = 168$, $t = 4.35$, $p < 0.05$. Therefore illness behaviour is influenced by locus of control.

4. Discussion

The results of this study confirm the first hypothesis, which states that locus of control will predict a significant variance in illness behaviour. The locus of control accounted for 21% variance in illness behaviour.

This finding was supported by other research findings where personality variables of external locus control were

associated with pattern of illness behaviour (5,7, 14). In a similar study personality factors of patients interfere with patients' illness behavior (2, 15). Other researchers noted that locus of control of an individual in different social environments predicts specific health related behavior (4,11). However, locus of control was found to have little relevance and implication for health behaviour (14).

The findings of Table 2 also supported the second hypothesis which states that there will be significant difference between participants classified as having internal and externals locus of control on illness behaviour. This is in line with the findings of Jayeoba (13), who found a significant relationship between illness behaviour and locus of control.

The Biopsychosocial model and Social learning theory of illness behaviour were in agreement to the findings of this study. The biopsychosocial model integrates the biological, psychological and social dimensions of individual's experience in explaining and managing illness behaviour. The model holds that illness-behaviour should not only consider the biological factors but also the psychological and social context of the individual. Each dimension is considered to be equally important and should be put into consideration in explaining variance in illness behaviour. The Social learning theory emphasized the importance of personality differences in responding to situations.

In view of the foregoing, the health practitioners especially in the University health centers should take into consideration the patient's biological, sociological and psychological wellbeing before administering drugs or any other form of treatment to them. The Universities should equally provide counseling unit and psychology clinics to discuss students' psychological problems that may influence their illness behaviour.

In conclusion, locus of control plays significant roles in determining individuals' illness behaviour. Thus, the implication of the study in terms of administering drugs and substances to patients by the health practitioners and other related professionals should focus attention on the patient's belief system and feelings in addition to the biological malfunctioning or complaints.

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