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A Study of Some Personality Variables Among Egyptian Epileptics

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ABSTRACT

Fifty patients with grand mal epilepsy arid fifty normal controls constituted the sample of the present study. All were literate males. The epileptic group ranged in age between ***15*** *arid 43.5 years arid the control group between* ***15*** *aiid* ***44.5*** *years. The two groups were properly matched. Electroencephalographic (E.E.G) recording was carried out for all epileptics.*

Both ***groups*** *were subjected to a battery of psychometric tests which included the Hostility-Guilt Inventory, Aggression Questionnaire, Inferiority jeelirigs questionnaire, Assertiveness Questionnaire, the life experiences survey, the perceptual rigidity tests (Dog/Cat, Triangle/Circle, and Tree/House tests). Wechsler-Bellevue Intelligence Scale (Verbal I.Q.) and Card for primary informations.*

The study disclosed statistically significant differences in mean scores of performance between epileptics arid controls on a number of tests assessing aggression, inferiority feelings, perceptual rigidity, arid undesirable life everits. Epileptics obtained significantly higher mean scores on such tests than of controls. Moreover, a statistically significant positive correlation was observed between undesirable life everits arid both aggression and inferiority feelings among epileptics.

INTRODUCTION AND AIM OF THE STUDY

Epilepsy is one of the commonest neurological disorders. It affects around 0.5 percent of the population. Despite its frequency and the fact that it is one of the oldest known disorders, epilepsy continues to be associated with ignorance and stigma. It is a major health problem

in terms of its human and economic costs *(Hermann arid 1984 Whitman).*

A diagnosis of epilepsy is a threat to an adequate conception of one's physical-self as well as personal identity, self-esteem and socio-economic security ***(Laaksorten, 1983).***

The consensus opinion is that epileptics as a group do have a higher incidence of intellectual impairment as well as behavioral and personality disturbances than is found in the population *(Elwan et al., 1976).*

Epilepsy acquired its importance to psychologists in view of the high . incidence of behavioral and emotional disorders among individuals with the disease. At least 30% of all epileptics have psychiatric problems ***(Golden et al., 1983).***

Some studies indicated that epileptics show more aggressiveness than chronic patients and normals *(Hermann and Whitamn, 1984; Kocigan el al., 1979; Prabhu, 1973 arid Saljpal arid Sucevic, 1980).* On the other hand, other studies indicated that there are no differences between them *(Hermann arid Whitman, 1984; Abdel Latif, 1982 arid Whitman, 1982).*

The family forms a strong wall around its epileptic member which while affording solid protection isolates him from his social environment *(Petres, 1979).*

The epileptic child was found to withdraw from family interaction ***(Richie, 1981).***

Epileptic subjects hold less positive feelings about school and their own self-worth *(Matthews, 1983).*

The epileptic population investigated does present certain quantitative differences as compared with control groups, the shift took place mainly in two dimensions, in rigidity - flexibility and in neuroticism - stability *(Vanzijl, 1971).*

The general personality type of chronic epileptics is characterized by a tendency towards irritability, hidden aggressiveness, orderliness,

general good mood, a tendency towards a certain rigidity, inflexibility of thought, and memory and concentration malfunction *(Hungei,* 1983).

Epileptics were more rigid than normals on a battery of tests of rigidity (Younes, *1976).*

High-life stress was found *to* be associated with more frequent disputes of all types for ex-patients and respondents from the general population *(Steadman and Ribner, 1982).*

Adolescents with epilepsy were significantly maladjusted compared to nonepileptic adolescents in the area of education, health, emotional and also total adjustment *(Rangaswami,* 1983).

The present study is aimed at assessing the performance of epileptics versus normal individuals on aggression questionnaires, inferiority feelings questionnaire; assertiveness questionnaire; perceptual rigidity tests; and life events questionnaire (undesirable events).

It also investigated the relation between stress on one hand, and aggression, confidence, assertiveness and perceptual rigidity on the other hand.

SUBJECTS AND METHODS

SUBJECTS

The present study was carried out on two groups of subjects, an epileptic group and a control one. The epileptic group comprised fifty patients suffering from grand mal epilepsy. They were all under the medical supervision of the staff members of the "Epilepsy Clinic" at Al-Hussein University Hospital. Their ages ranged between **15** and **43.5** years with a mean of 23.86 + 8.225. All were literate. Electroencephalographic recording was performed for all of them. Patients with a history of head trauma, focal fits, focal EEG abnormalities, mental retardation or primary psychiatric illness were **excluded from** the **sample.**

The control group on the other hand comprised fifty healthy male subjects, properly matched to the group of epileptics for age, educational level and verbal I.Q. Their ages ranged between 15 and 44.5 years with a mean of 23.75 + 8.185. None of them had any history suggestive of epilepsy, other paroxysmal disorders, or any neurological or psychiatric disturbances.

METHODS

Both groups were subjected to the following psychometric tools.

I-Tools Used to Measure the Variables of the Study

1. The Hostility - Guilt Inventory. This inventory consists of the following subscales: Assault, Indirect Hostility, Irritability, Negativism, Resentment, Suspicion, Verbal Hostility, and Guilt. (3,4) (Buss. *1961 arid Buss arid Burkee, 1957).*
2. Aggression questionnaire.
3. Inferiority feelings questionnaire.
4. Assertiveness questionnaire *(Rhatus, 1973).*
5. The life experiences survey *(Sarason et al., 1978).*

The perceptual rigidity test:
1. Dog/Cat tests *(Younes, 1976 and Khadri 1971).*
2. Triangle / Circle test.
3. Tree / House test.

II- Tools Used to Control the Variables

1. Wechsler Bellevue Intelligence Scale (Verbal I.Q).
2. Card for primary Information *(Melika 1968, 1957).*

RESULTS

The present study disclosed statistically significant differences in mean scores of performance between epileptics and normal controls on tests assessing aggression; inferiority feelings, perceptual rigidity, and undesirable life events. Epileptics obtained significantly higher mean scores on such tests than did controls (Table I). On the other hand there were no differences in performance between the two groups on the assertiveness questionnaire (Table I).

Table 1: Mean scores obtained by epileptics and normal controls on the test variables

	Epileptics. N. 50		Normals N. 50		T	Level of signi-ficance
	M	S.D.	M	S.D.		
Buss & Durkee Assault	21.9	5.608	19.96	4.395	1.906	**N.S.**
Indirect Hostility	18.18	4.34	16.3	3.238	2.44	0.05
Irritability	24.24	4.64	20.66	4.25	3.98	0.001
Suspicious	19.92	4.175	18.5	**3.17**	1.896	N.S.
Verbal aggression	28.74	4.348	26.06	3.524	3.352	0.001
Negativism	12.8	1.84	12.84	2.15	0.099	**N.S.**
Resentment	16.0	3.617	14.46	3.12	2.26	0.05
Guilt feeling	21.7	3.557	20.92	3.09	1.159	N.S.
Total Score	163.2	23.33	149.74	17.437	3.24	0.01
Aggression Questionnaire	91.46	14.439	81.1	10.606	4.048	0.001
Inferiority feelings Questionnaire	97.5	15.868	83.82	12.835	4.692	0.001
Assertiveness Questionnaire	62.76	9.694	64.68	7.923	1.073	**N.S.**
Dog/Cat test	1.68	1.318	0.7	0.9	4.298	0.001
Triangle/Circle test	1.92	1.354	0.92	1.128	3.971	0.001
Tree/Circle test	2.6	0.98	1.44	1.219	5.15	0.001
The life experiences survey	6.8	4.58	3.9	3.8	3.409	0.01

It should be noted that all our computation were based on Raw Scores

Correlations with each group revealed a statistically significant positive correlation between undesirable life events on one hand and aggression and inferiority feelings on the other hand among epileptics (Table 2).

Table 2: Correlations between stress and personality variables

Variables	Epileptics N = 5 stress	Level of sig.	Normals N = 50 stress	Level of sig.
Buss & Durkee scale (Aggression & Hostility)	0.350	0.05	0.179	**N.S.**
Aggression	0.340	0.05	0.155	N.S.
Inferiority feelings	0.450	0.01	0.247	**N.S.**
Assertiveness	0.212	N.S.	- 0.152	**N.S.**
Dog/Cat test	0.037	N.S.	- 0.160	N.S.
Triangle/Circle test	0.047	N.S.	- 0.239	N.S.
Tree/House test	- 0.082	N.S.	- 0.176	N.S.

DISCUSSION

Epileptics in the present study obtained significantly higher scores than controls on the aggression variable. This finding is in line with the observations previously reported by a number of researchers ***(Herman and Whitman, 1984; Kacigan et al, 1979 and Saljpal and Sucevic, 1980)*** but it is incompatible with the findings previously pointed out by some other investigators (Abdel ***Latif, 1982: Prabhu. 1973 and Whitamn et al., 1982).*** (This controversy might be attributed to differences in sample selection, methodologic procedures and/or cultural backgrounds).

Inferiority feelings were significantly higher among epileptics than controls in our study, This finding is in agreement with previous

studies carried out by ***Pelers (1979); Richie (1981) arid Matthews et al. (1983).***

The finding that epileptics face more stress than controls is in harmony with the observations of ***Scott (1978), Kocijan et al. (1979) Steadman and Ribrier (1982) and Laaksonen (1983)***

The observation that epileptics got significantly higher mean scores on the perceptual rigidity tests than controls, is in accordance with the findings previously stressed by ***Vanzijl (1971); Younes (1976) and Hunger (1983,).***

It has been suggested that the presence of a recurrent abnormality of brain function that occurs unpredictably and with much greater frequency due to epilepsy ***(Ervin, 1971)*** interacts with frustrations and psychosocial stress which epileptics interface and leads to a kind of unbalance between environmental demands and the epileptic's capacities to fulfill these demands. This interaction facilitates some kind of behaviour which depends on types of responses previously learned by the individual to cope with stress.

Frustrations produce investigations to a number of different types of responses, one of which is an instigation to some form of aggression. Because of their previous learning experiences, some people have acquired the habit of responding aggressively to thwarting ***(Berkowitz, 1978).***

These responses are previously learned basically through direct conditioning and imitation or modeling ***(Neapolitan, 1981).*** The thwarting of the fulfillment of the epileptic psychological needs means often fear and anxiety about the future and focuses on the possible personal and occupational or social losses as well as environmental attitudes and prejudices ***(Laaksonen, 1983).***

The diagnosis of epilepsy may mean the fear of progressive illness **and be** a **threat to socio-economic security and career, as well as a** blow to one's self-esteem in various interpersonal situations ***(Laaksonen,*** 1983).

The stress, threat, social isolation, and feelings of insecurity produce decrease of behaviour forms which the epileptic formulates

himself in it through facing adjustment demands. The rigid person attempts to gain security by grouping concepts into rigid categories of black and white (Eysetick, *1954).* Rigidity precludes his ability to behave-well and to cope with adjustment demands.

The above mentioned explanations can apply to the significantly positive correlations between stress and both aggression and inferiority feelings, and between the last **two** variables among epileptics in the present study.

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ETUDE DE CERTAINS VARIABLES DE LA PERSONNALITÉ CHEZ LES EPILEPTIQUES

ABSTRAIT

L'Objectif du recherche est d'etudier certains variables de la personnalite chez les epileptiques.

L'echantillon contient 50 de mâles epileptiques du genre d'epilepsie générale (Les grandes crises), et 50 males normaux comme un echantillon constant.

Les deux echantillons se ressemblent dans les variables de l'âge, le sexe, l'enseignement et dans l'intelligence verbale.

Une batterie de tests était applique, pour mesurer l'agressivité, les sentiments d'inferiorite, la confirmation du soi, le durcissement perceptible et la pression de la vie.

Les resultats indiquent que les epileptiques ont obtenu des moyens degres beaucoup plus haut et significant dans les variables de l'agressivité, les sentiments d'inferiorité, le durcissement perceptible et dans la pression de la vie, en comparison de degres des personnes normaux, et indiquent aussi, qu'il y a une correlation positive significative entre la pression de la vie et les sentiments d'inferiorite chez les epileptiques.

الموجـــز
دراسة لبعض متغيرات الشخصية لدى المصابين بالصرع

يهدف البحث الى دراسة بعض متغيرات الشخصية لدى الصرعيين. وقد تكونت عينة الدراسة من خمسين من الذكور المصابين بالصرع العام (نوبات كبرى) وخمسين من الأسوياء كعينة ضابطة وتم مضاهاة العينتين فى متغيرات السن والجنس والتعليم والذكاء اللفظى، وطبقت بطارية اختبارات تقيس العدوانية، ومشاعر الاحساس بالنقض، وتأكيد الذات، والتصلب الادراكى، وضغوط الحياة على العينتين.

وتشير النتائج الى أن الصرعيين قد حصلوا على متوسط درجات أعلى بشكل دال فى متغيرات العدوانية، ومشاعر الاحساس بالنقص والتصلب الادراكى، وضغوط الحياة، عن متوسط درجات الأسوياء كما تشير النتائج الى وجود ارتباط موجب دال بين ضغوط الحياة، وكل من العدوان ومشاعر النقص بين الصرعيين.