Master of Social Work
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ABSTRACT

EMPLOYMENT EXPERIENCE OF A GROUP OF SEIZURE PATIENTS

A descriptive study of the unemployment/employment experiences of ten unemployed and fifteen employed seizure patients who attend the Out-Patient Neurological Clinics of the Montreal Neurological Institute, Montreal, 1963-64.

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This study delineates circumstances contributing to the employment status of a group of twenty-five seizure patients attending the Out-Patient Neurological Clinics of the Montreal Neurological Institute. Certain aspects of the social and employment experiences of ten unemployed and fifteen employed patients are studied in detail.

The major researeh tool, a Questionnaire devised to obtain information of relevance to patients' employment adjustment and the circumstances contributing to it, was administered.

Personality characteristics were found to be the most important factors contributing to patients' present employment status. Variables such as age at seizure onset, duration of the seizure condition, education, level of occupational skill, attitudes toward employment, marriage, did not differentiate between unemployed and employed patients. Common to all patients was reticence to inform employers of their seizures.

McGill University

EMPLOYMENT EXPERIENCE OF A GROUP OF SEIZURE PATIENTS

A Descriptive Study of the Unemployment/Employment Experiences of Ten Unemployed and Fifteen Employed Seizure Patients Who Attend the Out-Patient Neurological Clinics of the Montreal Neurological Institute, Montreal, Quebec, 1963-64.

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by

Paul Marcella

Anne Rose

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CHAPTER I

THE RESEARCH PROBLEM

Introduction

The Out-Patient Neurological Clinics of the Montreal Neurological Institute [1] serve more than one thousand persons who suffer from seizures.

The type and severity of epileptic seizures experienced by this group of patients vary greatly. Some patients suffer only brief staring spells, stemming from minimal lapses of consciousness, which are virtually unnoticeable to the untrained observer. Others experience generalized convulsions, with loss of consciousness, and characterized by violent muscular movements.

The frequency of attacks experienced by this group of patients also varies widely. A proportion of these patients are presently completely free of seizures on a maintenance dosage of medication, while others are subject to as many as twenty attacks per day.

The seizures experienced by the vast majority of the Clinic's patients fall into one of three main seizure types, although there are innumerable variations of these most common types.

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[1] Hereafter referred to as MNI.

The three main seizure classifications, to which reference has just been made, are minor, major motor seizures, and temporal lobe seizures.[1] The occurrence of minor seizures is manifested by brief absences, lip twitching or smacking, minimal jerking of the limbs, or by the patient's ceasing to speak for a brief interval. Major seizures, in which the patient loses consciousness and frequently falls to the ground, with repetitive and violent bodily movements, are those which seem to be most closely linked in the mind of the layman with the term "epilepsy".

Manifestations of temporal lobe seizures encompass unusual automatic behaviour, that is, involuntary and purposeless actions such as pacing, cursing, fighting, which may strike the onlooker as inappropriate or bizarre.

Some patients, fortunately, have a warning, or aura, which may occur a matter of minutes or even hours before an attack, thereby enabling the patient to isolate himself from scrutiny or to protect himself from danger before onset of a seizure.

Other patients suffer only nocturnal seizures which may not interfere greatly with their daytime activities.

The etiology of seizure states falls into two major categories: those genetically determined, and those that are acquired. Specific causative factors remain in many cases unknown, although those seizures which are acquired are known to be produced by such agents as meningitis, birth injury, or other head trauma.

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[1] This descriptive classification is an over simplification of a complex situation. For example, some patients with temporal lobe epilepsy suffer from major motor seizures in addition to automatisms.

Among Clinic patients there is considerable variation in personal adaptation to seizures, and there has always been much interest on the part of the medical and social service staff in the determinants of the type of adjustment the individual patient makes to his illness.

Previous Studies of the Clinic Population

In 1949, a medical-social study of 178 Clinic patients was undertaken by two social workers on the staff of the MNI.[1] One of the chief reasons for this study was general recognition by the staff of the very important role played by both social and emotional factors to the debilitating or handicapping aspects of this condition. Another impetus for this study was a "realization of the pressing social needs of the epileptic."[2]

An effort was made by the authors to identify the difficulties experienced by these seizure patients and the resources available for their alleviation. In the authors' words, one of the major aims of the study was, "to create through consideration of individual patients, an awareness and understanding of these difficulties."[3] Through the vehicle of detailed case reports, the study did succeed in cataloguing many of the major social and emotional problems which confront seizure patients.

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[1] Joan C. Thomas and Elabel McL. Davidson, Social Problems of the Epileptic Patient (Montreal: Montreal Neurological Institute, 1949).

[2] Ibid., p. 6.

[3] Ibid.

Until 1962, however, no systematic effort was made to collect information concerning the general characteristics [1] of each member of the Clinic population. Some of this information was already recorded in each patient's hospital record. However, there was a lack of uniformity in the kind of information recorded.

The Clinic staff had observed a wide variation in the adequacy of social functioning of patients with similar or identical physical handicaps and were interested in obtaining data which might offer some explanation for these marked variations.

Therefore, in 1962, a socio-medical study by the Social Service Department, with the assistance of the medical staff, was initiated. The aims of this study were: (1) To collect information regarding the characteristics of the large group of seizure patients who attend the Out-Patient Neurological Clinics; (2) Through information obtained to gain insight concerning the range and degree of handicap represented in the patient group, and the relationship between these handicaps and social functioning; (3) Through comparison, where feasible, of the characteristics of this group of seizure patients with those of the general population in the Province of Quebec, it was hoped that information would be forthcoming in respect to how persons who are handicapped by seizures differ, as a group, from the general population; (4) To delineate areas that warranted further investigation and to facilitate selection of patient groups for such studies.

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[1] General characteristics include medical diagnosis, treatment, procedures, age, sex, marital status, etc.

The project was divided into two stages; 500 patients were to be studied in 1962 and the remaining 500 in 1963-1964. The first 500 patients were selected in the order of their appearance for regular Clinic appointments. The research tool was a questionnaire administered by Social Service Staff and volunteers to patients as they came in to Clinic. The length of time required for administration of the questionnaire to each patient was approximately 3-5 minutes. Responses were recorded on the Interview Schedule and later coded and transferred to IBM cards, making the information obtained easily accessible for the first time.

When a preliminary analysis of the data obtained from the first 500 respondents was made, certain areas appeared to warrant additional and more detailed scrutiny. One of these areas was that of employment.

Amongst other findings, it was observed that certain groups within the patient population whose seizure condition had become, in many cases, considerably improved through treatment at the Clinic, were unemployed and had been so for varying periods of time.

Employment has always been perceived as a major problem for many persons with seizures, due in part to the element of risk involved in their working near moving machinery, at heights, or in other positions where a sudden seizure onset might expose them or others to danger. Employment has also been considered a problem because of the residual prejudice in the community towards hiring persons who suffer from this illness.

Most clinicians who interest themselves in the problem agree that resistance to the employment of those who are subject to seizures is ascribable less to the objective physical handicap of the attacks, than to the attitude of society towards the epileptic, and to personality problems

of patients which may be an exaggerated response to their handicap.[1]

Results of Gallup polls, sponsored by the Department of Neurology at Columbia University show that there is still much misunderstanding among the general population in regard to seizures, although trends measured in the United States over the ten-year period 1949-1959 indicate that the degree of misunderstanding and misinformation has definitely lessened.[2] In regard to public opinion specifically concerning employment for seizure patients, the polls recorded a most heartening rise of 30 percentage points in the years from 1949 to 1959 in the prevalence of the opinion that a person suffering from seizures should be accorded the same chance for employment as any other member of the population. In 1959, 75 per cent. of those polled indicated they thought that epileptics should be employed without discrimination.[3]

Even higher rates of positive response were elicited for those in the better educated and higher income subgroups of the population. Whether these same respondents would act in accordance with their expressed opinion were they faced with the decision of hiring a seizure patient is, of course, impossible to predict.

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[1] H. Goodglass et al, "Epileptic Seizures, Psychological Factors and Occupational Adjustment," Epilepsia, Vol. IV, No. 3/4 (December, 1963), p. 322.

[2] William F. Caveness, "Trend in Public Attitudes Toward Epilepsy over the Past Decade," Epilepsia, Vol. I (1959-1960), p. 389.

[3] Ibid.

Although discriminatory employment practices undoubtedly still exist, at least one recent major study in Denmark has shown that in a very large sample of seizure patients, the occupational problems of the latter did not differ, when compared with official unemployment statistics, from those encountered in the general population. [1]

In addition, a review of studies published in the last twenty years suggests that as high a percentage as 74-90 of those with infrequent seizures and normal intelligence are gainfully employed. [2]

In the light of these findings the number of unemployed patients identified in the 1962 MNI study is surprisingly large and appeared to warrant investigation.

In addition to providing the medical treatment instrumental in controlling patients' seizures, the MNI Clinic is interested in their rehabilitation and return to adequate social functioning. An important part of social functioning is, of course, satisfactory employment.

> From a social point of view, it is obviously of the greatest importance for the epileptic to keep his job. In addition, employment is a highly contributory factor in keeping the frequency of seizures at a low level.
> (Risch and Rose, 1957, Lorbeer and Barrow, 1958) [3]

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1 Palle Juul-Jensen, "Epilepsy - A Clinical and Social Analysis of 1,020 Adult Patients with Epileptic Seizures," Acta Neurologica Scandinavica, Supplementum No. 5, Vol. XL (1964), p. 135.

2 Palle Juul-Jensen, "Socio-medical Problems of Epileptics - A Preliminary Report," Epilepsia, Vol. II (1961), pp. 197-98.

3 Palle Juul-Jensen, "Epilepsy - A Clinical and Social Analysis of 1,020 Adult Patients with Epileptic Seizures," p. 100.

In addition to the inevitable decrease in self-esteem, the lowered income and the reduced social circumstances of the patient who is unemployed there is to be considered also the fact that persons without work for extensive periods of time tend to become a charge upon the community. A proportion of Clinic patients receive Disability Assistance and other welfare subsidies, although it would not appear that all of these patients are completely disabled in regard to employment by their seizures alone. It is suspected that many have personality problems more disabling than their seizures, but this has never been empirically assessed.

Also to be noted is that many of these unemployed patients subsist entirely on the mere pittance provided by disability pensions and other subsidies. This suggests that there exists an urgent economic impetus towards employment. Many remain, nevertheless, in the ranks of the unemployed.

In contrast, there was also identified in the 1962 MNI study a very large group of seizure patients who have been steadily employed for a number of years.

In view of these contrasting findings, it was obvious that further studies were indicated to explore the circumstances that contribute to the employment/unemployment of seizure patients. The study upon which this thesis is based constitutes one of the studies envisaged to fill this need.

Because of the increasing involvement of social workers as members of diagnostic and treatment teams, an opportunity was provided by the Medical Director and the Director of Social Service at the MNI for two students to participate in this study and to use the data for purposes of their Master of Social Work degree thesis. Both students are caseworkers and in the final year of the Master of Social Work program at McGill University.

Statement of the Problem

The present study is focussed on two groups of patients: a permanently employed group of 15 seizure patients, and an unemployed group of 10 patients. Both groups were selected from the 500 patients who participated in the MNI's 1962 study. Patients in the permanently employed group have been continuously employed for at least three years. Patients in the unemployed group were identified in the MNI study in 1962 as unemployed for varying periods of more than six months' duration, or as only occasionally employed.

Major question: The aim of the present study is to obtain as much information as possible concerning the circumstances that have contributed to the employment status of these two groups of patients. In other words, this study aims to obtain data indicative of the answer to the following question:

> What circumstances contribute to the employment/ unemployment of these patients?

In order to approach the answer to this question, certain aspects of the patients' work experience must be examined. These aspects include, broadly: the characteristics of the employment experiences of both groups, and the impact of their seizures upon employment. Other areas explored within this context are patients' contact with the MNI Clinic and their social and environmental milieu.

In order to isolate most effectively the direct and indirect influence of seizures on employment, it was decided to study only those patients whose cases did not appear to be complicated by such added difficulties as mental retardation, psychosis, or other neurological deficits

in addition to seizures. It appeared likely, in addition, that any of these complications might overweigh seizures in presenting a barrier to employment.

The social and employment situations of patients with deficiencies other than their seizures have been investigated in several recent large-scale studies.[1, 2, 3] The researchers in the present study, limited of necessity to the study of a small number of patients, decided to focus their investigation upon only those patients who appeared best able to undertake and retain gainful employment.

An additional criterion established initially for the selection of the present patient groups was that patients were identified by the 1962 study as seizure-free.[4] This was done to obviate the necessity for medical judgments concerning the severity and frequency of patients' seizures and in order to study in detail only those patients least disabled presently by seizures. Detailed criteria for the selection of the two patient groups included in the study are presented in Chapter II.

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1 Juul-Jensen, "Epilepsy - A Clinical and Social Analysis of 1,020 Adult Patients with Epileptic Seizures."

2 Neil Gordon and Sheridan Russell, "The Problem of Unemployment Among Epileptics," Journal of Mental Science, Vol. CIV (January, 1958).

3 Carl Henry Alström, "A Study of Epilepsy in its Clinical, Social and Genetic Aspects," Acta Psychiatrica et Neurologica, Supplementum 63 (1950).

4 The terms "seizure-free" and "under complete control" indicate that the patient had not experienced a seizure within two years preceding the evaluation of his condition in the 1962 study.

The period of time available for research limited the size of the sample and, to some extent, the method used to collect data. Most of the data upon which the study is based were obtained directly from the patients studied and were, for the most part, unverified through the use of other likely sources of information.

Because of the small size of the sample, results of this study are limited in application to the sample itself. Hopefully, they may provide clues that could constitute the basis for further studies.

CHAPTER II

METHODOLOGY

In this chapter, a description is given of the research media and research procedures used to obtain the data required to answer the question raised in Chapter I. A profile is also given of the general characteristics of the patients who participated in this study.

Research Media

Selection of the Sample

As already indicated in Chapter I, two groups of seizure patients participated in this study. One group, Group A, is comprised of 10 unemployed seizure patients. The other group, Group B, is comprised of 15 permanently employed seizure patients. These patients were selected from a total sample of 500 seizure patients who participated in a study undertaken at the MNI in 1962. [1]

Because the time limitations of the two researchers precluded completion of more than 20 interviews each, the research plan originally called for samples comprised of 20 unemployed and 20 employed patients. However, for reasons to be discussed later in this chapter, it was not possible to obtain a sample of this size.

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[1] Supra, p. 4.

Criteria: The following criteria were established to select the two samples. The patients were required to be:

(1) under complete control in respect to seizures, or nocturnal seizures only;

(2) free of any neurological symptom other than epilepsy;

(3) free of conditions of psychosis, mental retardation, and mental deterioration;

(4) between the age of 18 and 60;

(5) (a) unemployed, or only occasionally employed for periods ranging from six months to three years or more (Group A - Unemployed Group);

(b) permanently employed for the past three years with the same employer or two or more employers (Group B - Employed Group);

(6) able to understand and speak English;

(7) a resident of the city of Montreal.

The first three criteria were used to eliminate the factors most likely to immediately interfere with the patients finding employment or holding positions. Patients under age 18 were eliminated for the reason that they would have accumulated relatively little work experience up to that age. Patients over age 60 were eliminated because the interviewers wished, as far as possible, to concentrate on patients in the prime of their employment experience. Also taken into consideration was the fact that employment becomes more difficult to obtain as one grows older. Thus, age 60 became an arbitrary cut-off point. The sixth criterion was established to enable the interviewers, who speak only English, to interview each subject. Patients who were residing outside Montreal would have invested considerable time in travelling to and from the Institute and in addition a certain amount of expense would have been incurred. For this reason they were eliminated.

The initial selection of Group A and Group B was accomplished through the use of I.B.M. data cards. [1] Following this the hospital record of each seizure patient, eligible according to the established criteria for inclusion in the study, was systematically checked for the following information: address, phone number, language spoken, date of birth, and any major defects in personality which had been recorded. This also served as a check against the I.B.M. data card that was used.

Group A Sample: Thirty-seven seizure free unemployed patients were identified in the original MNI sample of 500. When the records were consulted and the criteria of language and age were applied, this sample was further reduced to 21 patients. Of the 21 patients contacted, one refused to participate, four requests for participation in the study were returned due to change of address, and nine did not answer. Therefore, with only seven patients available for the sample, the criteria for Group A had to be changed to include those patients whose seizures are not under complete control and who continue to have minor seizures. Twenty-two patients conformed to this criterion. This group was reduced to ten patients due to the fact that the notes in the record of twelve patients stated that there were difficulties present such as drug addiction, alcoholism and paranoia. Some of these records had a profusion of notes as to the personality problems manifested in these patients. Of the ten patients with minor seizures who were contacted, one refused to participate, two requests for participation in the study were returned due to a change of address, and four did not answer. Therefore, only three patients were available from the group with minor seizures.

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[1] The 1962 MNI study utilized data cards to record all the information obtained.

Thus, a total of 59 unemployed patients were selected from the original sample of 500. This number was reduced to 31 patients when the criteria were applied and the records consulted. When the recruitment procedures had been utilized, a total of ten patients participated out of 31 who were contacted.

Group B Sample: Forty-three seizure free, permanently employed patients were identified in the original MNI sample of 500. When the records were consulted and the criteria of language and age were applied, this sample was further reduced to 28 patients. Twenty patients were randomly selected from this group and letters were sent to them. Due to the fact that many of these patients were unable to participate, the remaining eight were also sent letters. Of the 28 patients contacted, three refused to participate, two requests for participation in the study were returned due to change of address, and nine did not answer. The criteria for the sample of employed seizure patients remained the same as initially established. Of 28 patients selected on the basis of these criteria, 15 participated.

Recruitment of Participants

Letters [1] were sent to all patients included in samples A and B, explaining the nature of the study and requesting their help. Included in this letter was a form and a self-addressed envelope. On the former, space was provided for the patient to indicate his willingness to participate in the study at a time convenient for him. When the answers were received,

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[1] See Appendix A.

appointments were made by telephone or letter and the patients came to the Social Service Department of the MNI for the interview.

A great deal of difficulty was experienced in obtaining a sample for Group A and as previously indicated only ten patients participated out of a total of 31 who were contacted. In Group B, fifteen patients participated out of a total of 28 patients who were contacted.

Research Tools

In order to obtain the information required to answer the questions raised in this study, a Questionnaire [1] was constructed and used for both the unemployed and employed groups of seizure patients. It consists of six parts which include:

1. Identifying information, e.g. age, sex, marital status, etc.
2. Educational achievement.
3. Unemployment-employment experience.

   The aim in this section was to obtain information concerning: past and present employment experience, influence of seizures on employment, unemployment periods, and location of employment.
4. MNI clinic contact.
5. Social and environmental history.

It is to be noted that in keeping with the purpose of this study, the Questionnaire was constructed to obtain insight into the circumstances contributing to the patients' unemployment-employment experience.

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[1] See Appendix A.

The Questionnaire contains a section pertaining only to Group A entitled "Unemployment Experience." The section pertaining only to Group B is entitled "Employment Experience." All other sections of the Questionnaire were administered to both Group A and B.

A number of questions [1] in this Questionnaire were answered through information recorded in the Interview Schedule of the 1962 MNI study.

Research Procedure

The Questionnaire was used by the researchers to structure the interview and to obtain systematically the information required for the purposes of this study. While using the Questionnaire as a structure, the researchers also encouraged an atmosphere to enable the patient to talk at greater length and where indicated the researcher explored further the particular topics under discussion.

In the initial phase of the interview, the researcher explained briefly the purpose of the study and assured the person that complete confidentiality would be observed. The length of each interview varied from three-quarters of an hour to two-and-a-half hours. Most of the longer interviews were with the Unemployed Group.

In addition to recording the person's responses to the Questionnaire, the researchers were required to make certain clinical judgements based on the observed behaviour of the person during the interview. These judgements included a tentative diagnostic evaluation of the person's cooperation in the interview, the reliability of his responses, his intellectual level, general appearance, personality and employability.

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[1] See Appendix A, questions 9 and 77.

When each interview was completed a letter of appreciation was sent to the individual who participated in the study.

Characteristics of Patients Who Participated in the Study (Group A - Unemployed Group and Group B - Employed Group)

Sex: In Group A there were eight males and two females. Group B included eleven males and four females.

Age: In Group A the range in age was from 29 to 56 with an average age of 40. The range in Group B was from 21 to 63 [1] years, with an average age of 37. Table A shows the age distribution of both A and B Groups.

Nationality: All the patients in Group A were born in Canada. In Group B, all but two patients were born in Canada, with one having been born in Sicily and one in Greece.

Marital Status: Group A includes four married patients, four who are separated, and two who are single. Group B consists of seven married patients, three separated and five single.

Residence: In Group A there are four patients living with their family of procreation, four living with their family of orientation, and two living alone. In Group B, seven live with their family of procreation, seven with their family of orientation, and one lives alone.

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[1] One patient, age 63, was contacted by mistake and was allowed to participate.

TABLE I

AGE DISTRIBUTION OF 15 EMPLOYED AND 10 UNEMPLOYED SEIZURE PATIENTS WHO ATTEND THE OUTPATIENT NEUROLOGY CLINIC AT THE MONTREAL NEUROLOGICAL INSTITUTE, MONTREAL, QUEBEC 1963-64[1]

Interval	Number of Employed Seizure Patients	Number of Unemployed Seizure Patients
Total	15	10
15 - 19		
20 - 24	3	
25 - 29	2	1
30 - 34	1	2
35 - 39	1	3
40 - 44	5	
45 - 49	1	2
50 - 54	1	1
55 - 59		1
60 - 64	1	

Language: In Group A the primary language spoken is as follows: 5 English (2 also speak French), 1 Yiddish (also speaks French and English), 4 French [2] (3 also speak English). In Group B the primary language spoken is as follows: 4 English (all speak French also), 9 French [3] (8 also speak English), 1 Italian (also speaks English and French) and 1 Greek.[4]

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[1] Hereafter it will be assumed that all patients referred to in Tables will be from the above mentioned source.

[2, 3, 4] In both Groups A and B interpreters were found for the three patients who did not speak English.

Number of children in family of orientation: In Group A, the number of children range from 2 to 8 with an average of 5 children per family. In Group B, the number of children ranged from 1 to 13. The average number of children per family was 5.

Number of children in family of procreation: In Group A, for eight married patients the number of children ranged from 0 to 6 with an average of 2 children per family. In Group B, for ten married patients the number of children ranged from 0 to 3 with an average of 2 children per family.

Order of patients birth: In Group A, the order of birth ranged from first to fifth, with the largest number of patients being second and fourth. The range for Group B was from first to sixth with the largest number of patients being first and fourth.

Nationality of parents: In Group A, one couple came from Ireland and another from Central Europe. All others were born in Canada. In Group B, one couple was born in Greece and another in Sicily. All others were born in Canada.

Education

Grades completed: The grades completed in Group A ranges from 4 to 10, with an average education for the group of 7.5 grades. There appears to be a marked discrepancy between the last grade completed and the total number of years in school attendance for most of this group. Nine out of ten patients had to repeat from one to three grades to reach the level they completed. In Group B the grades completed range from 4 to 12 with the average for the group of 8th grade. Over half of this group, nine, had to repeat from one to three grades. The writer raises a question as to the circumstances which contributed to the repetition of grades when seizure onset occurred later in so many cases.

TABLE 2

EDUCATION LEVEL OF 15 EMPLOYED AND 10 UNEMPLOYED SEIZURE PATIENTS

Grade Completed	Number of Employed Seizure Patients	Number of Unemployed Seizure Patients
Total	15	10
IV	1	1
V	1	
VI	3	1
VII	2	4
VIII	1	1
IX	2	1
X	1	2
XI	1	
XII	3	

Table 2 shows the grades completed for Group A and B.

Specialized education: In Group A, three patients completed trade school or apprenticeship and were issued trade licences, one partially completed a business course, and six had no specialized education. In Group B, two patients completed trade school and were issued trade licences, two completed an apprenticeship, three completed a business course, one had a year of university training which was not completed, and seven had no specialized education.

Reason for leaving school: In Groups A and B there was a wide range of reasons for leaving school. These reasons were as follows:

Reason	Number of Patients	
	Group A	Group B
Total	10	15
subjects too difficult	1	
lack of interest	1	1
course completed	1	3
had to work to help family	3	6
friends all working	1	
desire to work	1	1
dislike of teacher	1	
seizures	1	2
poor grades		1
mother was ill		1

Effect of seizures on schooling: In Group A, the schooling of three patients was affected by seizures. Of the seven who were not affected, the age of onset was later in life. The conditions present which affected schooling included: poor memory as a result of medication, frequent seizures, "nervousness" which led to seizures, feeling of "being different" from classmates.

In Group B, six patients' schooling was affected by their seizures. Of the nine patients whose education was not affected, six had onset of seizures at a later age. The conditions which affected schooling for this Group included: faulty memory, tenseness and shyness in a group which brought on seizures, inability to concentrate or study, doctor's advice to remain at home for a year because of seizure frequency. One patient in this Group was removed from school because of frequent seizures and given private lessons; this resulted in her obtaining her Grade 12 certificate three years earlier than is usual.

Training in the past year: In Group A, none of the patients had attended classes or undertaken training of any kind. In Group B, two patients had enrolled in company training programs where courses were sponsored by the company, one patient is going to night school to finish high school, and two patients are attending language classes at night.

CHAPTER III

THE EMPLOYMENT EXPERIENCE OF GROUP A

In this Chapter, data related to the employment experience of ten unemployed seizure patients and to the circumstances that contribute to their employment difficulties are presented.

This Group, (designated in this study as Group A), comprises ten seizure patients. These patients were identified at the time they were interviewed in the 1962 MNI study as unemployed for at least the three preceding months, or only occasionally employed.

At the time this sample of ten was selected for the present study, there were no data available to indicate that there had been any change in the employment status of any member of this group. After these patients had been selected, however, it was discovered in the course of interviewing for the present study that four of this group had since become employed. Three of these patients had become employed since the MNI study; the fourth, by his own admission, had been "informally" employed at the time of the previous study, but had not revealed this fact because he was receiving unemployment compensation.

Because all four of these currently employed patients had been unemployed for varying periods before obtaining work, and because they did not meet the criterion of having been continuously employed for three years or more, it was decided not to transfer them to Group B, the employed group, but to include them for purposes of this study in Group A.[1]

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[1] Section III(A) - Employment History - of the Questionnaire was administered to these four patients, rather than Section III(B) - Unemployment History.

This afforded an opportunity for comparison within the Group A sample.

The six patients in this Group who remain unemployed are designated as Group A (Unemployed) and the four currently employed as Group A (Employed).

The content of this Chapter is discussed under the following captions:

1. Employment Experience
2. Influence of Seizures on Employment
3. Location of Employment.

Employment Experience [1]

Types of Work Performed

According to Tables 3 and 4, which follow, the majority of patients in Group A (Unemployed) were last employed in relatively unskilled types of work, while patients in Group A (Employed) were last and are currently employed in slightly more skilled occupations. It is to be noted that one patient in the Employed Group, Mr. E, is currently doing general work but holds an electrician's licence and is also skilled in elevator maintenance. He is waiting medical approval of a return to this more skilled, but more dangerous work.

From a superficial examination of the types of work undertaken by these two groups, it appears that the employed patients are able to perform jobs of a more skilled nature than are those who remain unemployed. This tendency conforms to the finding of Goodglass et al, that "the unskilled population is much more vulnerable to loss of earning power through seizures"[2] than are patients with occupational skills.

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[1] A resume of each patient's employment history is presented in Appendix B.

[2] Goodglass et al, op. cit., p. 338.

TABLE 3

TYPES OF WORK MOST RECENTLY PERFORMED, LENGTH OF EMPLOYMENT, REASONS FOR TERMINATION OF EMPLOYMENT, AND DURATION OF UNEMPLOYMENT, FOR 6 UNEMPLOYED PATIENTS IN GROUP A

Case	Type of Work	Length of Employment	Reason for Termination of Employment	Subsequent Period of Unemployment
Mr. A	Accounting clerk	6 months	Employer stated his work not satisfactory	5 years
Miss W	Cafeteria tray girl	6 weeks	Physician advised stopping work because of gynecological complaints	3 months
Mr. O	Cigarette-making machine operator	10 years	Left work to enter hospital; employer would not allow return to job following successful treatment	4 years
Mr. F	Cleaner	2 years	Employer told him no more work available; asserts fellow employee "made trouble" for him	6-8 years
Mr. X	Hospital/jail watchman	18 months	Disagreements with supervisor; attack of "liver trouble"	4 years
Mr. I	Sweeper and tram cleaner	6 years	Company doctor advised stopping work because of "nervous breakdown"	8 years

TABLE 4

TYPES OF WORK PREVIOUSLY PERFORMED, LENGTH OF EMPLOYMENT, REASONS FOR TERMINATION OF EMPLOYMENT, SUBSEQUENT PERIOD OF UNEMPLOYMENT, PRESENT OCCUPATION, AND DURATION OF PRESENT EMPLOYMENT, FOR 4 EMPLOYED PATIENTS IN GROUP A

Case	Type of Work Previously Performed	Length of Employment	Reason for Termination of Employment	Length of Unemployment	Present Occupation	Duration of Present Employment
Mr. D	Radio repair for small store	1 year	General lay-off, followed by company bankruptcy	3 years	Bank messenger	14 months
Mr. T	Machine operator at electric company	5 years	General lay-off; although asked to return to work, sought job offering more security	6 months	Steamfitter at hospital	3 years
Mrs. L	Clerical	3 months	Left voluntarily because did not get along with other employees	1 year	Clerical and insurance claims	14 months full-time, preceded by 4 years part-time
Mr. E	Elevator maintenance at grain elevator	9 years	Left work to enter AMI[a]; after treatment, doctor advised previous job too dangerous	9 months	General work at grain elevator	6 months

[a] Allan Memorial Institute

Length of Present Unemployment

Table 3 shows that the six patients in Group A (Unemployed) were unemployed for periods varying in length from three months to eight years. However, one patient, Miss W, who was unemployed for only three months, had held her last job for only 5-6 weeks and was unemployed for three years prior to this brief period of employment. The mean length of unemployment for the other five members of this Group was 5.6 years.

For these six unemployed patients, duration of their last jobs varied from 5-6 weeks to 10 years. The median length of time in these last jobs was between two and three years.

As is indicated in Table 4, the four subjects in Group A (Employed), prior to obtaining their present positions, were unemployed for periods ranging from six months to three years. The mean length of unemployment was 1.6 years, a period considerably shorter than the mean for Group A (Unemployed). These four patients have been in their present jobs from six months to three years, the mean length of employment to date being 17.5 months.

Circumstances Leading to Termination of Last Job

Group A (Unemployed): Reasons for termination of the last positions held by patients in this Group are shown in Table 3. Three of these six patients left their last job through action taken by their employers. Reasons for their dismissal varied; one employee, Mr. A, was told that his work was not satisfactory although he had believed he had been doing good work and had not been warned of impending termination. When pressed by the interviewer concerning any other reasons for his dismissal, Mr. A

hinted that his employer's knowledge of his seizure condition could have been a contributing factor. Another subject, Mr. F, reported he was told that work was no longer available; he suspected, however, that another employee "had made trouble for him" - the nature of which he did not disclose. The third patient, Mr. X, was fired because of disagreements with his supervisor. He indicated that an additional reason might have been an acute attack of "liver trouble" which he had suffered at work.

A fourth member of this Group, Mr. O, left his job, after ten years with the same company, to enter hospital for treatment of an increasingly incapacitating seizure condition. After discharge from hospital, although good seizure control had been achieved, he was informed that the company's insurance would no longer cover him, and that on this account, he could not return to work.

Two other patients terminated employment on medical advice: Miss W for a gynecological condition unrelated to seizures, and Mr. I, who was advised by the company doctor that he was having a "nervous breakdown" and should take at least a year off from work. This patient had been continuously employed with the same firm for six years and his employer had been aware of and tolerant of his seizures.

Group A (Employed): Table 4 shows that two patients were released from their previous jobs during general lay-offs. One of these two patients, Mr. T, was asked, subsequently, to return to work, but declined as he wished to find a position that offered more security. Another patient, Mrs. L, left her job voluntarily because she did not get along with the other employees. The fourth patient, Mr. E, left work to enter the Allan Memorial Institute for treatment of severe and long-standing

alcoholism, which was contributing to his seizure episodes. Upon discharge, his physician instructed his former employer, an elevator company, that he should not be allowed to work in elevator shafts until his seizures were under complete control. He was thus unable to resume his former employment.

It would appear that in Group A, seizures were directly related to termination of previous employment in only two instances, those of Mr. O and Mr. E. The relationship between seizures and employment is discussed more fully later in this Chapter.

Patients' Attitudes Towards Employment

The researchers were interested to determine whether the attitude towards employment, the degree of job satisfaction, and the nature of relationships with other employees appear to have any bearing on patients' present employment status. Several questions in the Questionnaire were included for this purpose.

Compliance with Demands of Employment

Patients in both Groups, Group A (Unemployed) and Group A (Employed), denied any unusual absences from work, and all worked at least a full 8-hour day.

Three patients in Group A (Unemployed) and all patients in the Employed Group denied difficulty in being on time for work. Both Mr. A and Miss W commented that they had always arrived too early for work, Miss W habitually arriving at 8:30 A.M., rather than at 10, the hour at which she had been instructed to commence work. It would appear that both these patients were somewhat anxious about retaining their positions.

Two patients in Group A (Unemployed) attributed their difficulty in being on time for work to drinking the night before. Another, Mr. O, indicated that he felt drowsy and ill on the mornings following his frequent nocturnal seizures. He commented, however,that he had always forced himself to arrive punctually.

In the Unemployed Group, only one respondent admitted to problems on his previous job; this patient, Mr. X, had been fired because of disagreements with his supervisor, and reported that he had had great difficulty in working under him.

Patients in the Unemployed Group were asked also whether there were any particular problems at home that had interfered with their employment. Mr. I indicated that his wife was extremely jealous of his opportunity for meeting other women at his place of employment. This allegedly caused considerable friction between them, leading to an increase in his drinking - which did interfere with his employment.

Attitude Towards Last or Current Job

All patients were asked to discuss the aspects of their jobs which they liked best and those they disliked. This information is detailed in Table 5.

Group A (Unemployed): All six patients in this Group reported that they had liked their last job, with the exception of Mr. I, who was ambivalent.

Three patients were unable to identify any aspects of their work they had disliked; two others, Mr. F and Mr. X, complained that their boss had been difficult to get along with. Miss W had not liked being asked

to replace kitchen help in her cafeteria job, and also stated that she had become "very nervous" when fellow workers quarreled.

Four of the six patients in this Group were unable to think of any other type of work that they would have preferred to their last position. Miss W stated that she would rather have been a saleslady than a cafeteria worker and on one occasion she had been offered this opportunity in the department store where she was employed. However, on the advice of a relative, a physician, she declined the change in position. The sixth patient in this Group, Mr. I, liked only one aspect of his job, night assignment to cleaning street cars, and would have preferred to have had no other duties.

Group A (Employed): The job aspects liked by this Group are shown in Table 5. Two of the four patients had no dislikes related to their present employment. The other two, Mr. T and Mr. E, complained only that the job paid too poorly.

Two patients claimed that they would not prefer other work to that which they are doing. Another patient, Mr. D, indicated that he was more interested in electrical repair work, for which he had trained, but is "resigned" that he is not really capable of highly skilled work in this specialty. The fourth patient, Mr. E, would prefer his old trade of elevator maintenance to the general work he is now doing, and hopes to return to it shortly.

Altogether, it would appear that almost every member of Group A was, or is, fairly satisfied with most aspects of the type of work he was, or is, doing. The degree of satisfaction with their previous job evinced by patients in Group A (Unemployed) appears to be too uniformly high, and could perhaps represent an over-idealization of their past work situation in the light of their present unemployment.

TABLE 5

ATTITUDES OF 10 GROUP A PATIENTS TOWARDS PREVIOUS OR PRESENT JOBS

Case	Occupation	Aspects of Job Liked	Aspects of Job Disliked
Mr. A	Accounting clerk	Steady, clean work	None
Miss W	Cafeteria tray girl	Good boss; enjoyed cafeteria work	Replacing kitchen helpers; sensitive to quarreling amongst fellow employees
Mr. O	Machine operator	Learning to be a machine mechanic	None
Mr. F	Cleaner	All jobs the same; just liked getting paid	Boss was as difficult to get along with as he himself
Mr. X	Hospital/jail watchman	Guarding patients; felt very sympathetic with them	Boss was very difficult to get along with
Mr. I	Sweeper and tram cleaner	Night work and assignment to cleaning street cars	None
*Mr. D	Bank messenger	Feels useful; enjoys being in and out of doors during the day	None
*Mr. T	Steamfitter at hospital	The variety; exciting to figure out what is wrong with machines and to fix them	Salary too low
*Mrs. L	Clerical and insurance	Working with figures; amusing insurance claims	None
*Mr. E	General work at grain elevator	Supervisor knows he can do more skilled work, so does not give him much to do; enjoys finishing work by 4:30 P.M.	Pay poor in relation to his experience

* Patients in Group A (Employed)

Relationships with Other Employees

All patients in Group A indicated that they got along reasonably well with their fellow employees. However, the question designed to elicit this information was poorly formulated. Mr. E did report that prior to treatment at the Allan Memorial Institute he had always been very quick-tempered with his helpers on the job. He now makes an effort not to "fly off the handle" and is, in consequence, getting on much better than previously with fellow workers.

When pressed to state whether they experienced any particular problems with other employees, two patients in Group A (Unemployed) and two in Group A (Employed) indicated that they disliked one other worker. The usual reason for this dislike was the patient's impression that the employee in question did not carry his share of the workload.

Four of the six patients in the Unemployed Group had made particular friends at previous places of employment. In Group A (Employed), however, only Mr. E indicated that he had any special friends at work. This finding suggests that relationships with other employees, beyond the minimum contact necessary for the execution of work assignments, have no bearing on the employment or unemployment of this patient group. Again, it could be further indication that there is a tendency for the Unemployed Group to idealize, in retrospect, an earlier employment situation.

Influence of Seizures on Employment

Onset of Seizures

Table 6 shows the age of onset of seizures for patients in Group A. The mean age of onset is 21 years. Age of onset for 70 per cent. of this group falls after the age of 16, which is a relatively high incidence of development of seizures in adulthood.

TABLE 6

AGE OF ONSET OF SEIZURES FOR 10 PATIENTS IN GROUP A

Age in Years	Number of Patients	Per cent.
Total	10	100
0 - 5	0	0
6 - 10	1	10
11 - 15	2	20
16 - 20	2	20
21 - 30	4	40
31 - 40	1	10

Among authors who have considered the importance of age of onset for subsequent personality development and social adjustment, Lennox and Mohr observed that those patients who have onset of seizures before age 19 have a poorer social prognosis. [1]

In contrast, Wilson, Stewart, and Parker, in a study of 42 male patients who developed seizures after the age of 20, report that, in spite of the later onset of the illness, this group of patients appeared to be severely handicapped in regard to employment by disturbances other than their seizures. They propose that development of seizures in adult life may be in the nature of a catastrophic event, resulting in the development of psychopathology. [2]

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[1] Margaret A. Lennox and Jennie Mohr, "Social and Work Adjustments in Patients with Epilepsy," American Journal of Psychology, Vol. CVII (1950), p. 257.

[2] W.P. Wilson, L.F. Stewart, and J.B. Parker, "A Study of the Socio-economic Effects of Epilepsy," Epilepsia, Vol. I (1959/60), p. 311.

A common sense position would seem to be that the effect of onset of seizures, at any stage of life, on the personality (and consequent social and employment adjustment) of the sufferer is, in all probability, in direct proportion to the stability of the premorbid personality, and to the degree of acceptance and support the patient's habitual environment is able to provide.

Duration of Seizures in Relation to Unemployment

In a study of the employment problems of 400 adult epileptics, Gordon and Russell found that duration of the illness was much the same for groups of employed and unemployed patients. For example, in comparing unemployed with employed men over the age of 45, the age group in which patients were likely to have had seizures for the longest periods, the authors found an average duration of seizures of 30 years for the unemployed patients and of 28 years for the employed men. They concluded that a long history of epileptic seizures does not influence a patient's ability to obtain and hold employment. [1]

Table 7, which follows, shows the approximate total period of unemployment experienced by Group A patients in relation to the number of years they have been available for employment and the age at which seizures developed. The mean period of unemployment for the ten patients is 5.1 years, or, roughtly, 20 per cent. of the mean period patients were available for work, without reference to age of seizure onset.

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[1] Gordon and Russell, op. cit., pp. 110-111.

TABLE 7

AGGREGATE OF UNEMPLOYMENT IN RELATION TO AGE, AGE AT ONSET OF SEIZURES, AGE AT FIRST EMPLOYMENT, AND NUMBER OF YEARS AVAILABLE FOR EMPLOYMENT, FOR 10 PATIENTS IN GROUP A

Case	Age	Age at Onset in Years	Age at Which First Became Employed	Number of Years Available for Employment [a]	Aggregate of Unemployment
Mr. A	29	16½	17	12	9 - 10 years
Miss W	37	13	15	22	3 - 4 years
Mr. O	37	25	17	20	4 years
Mr. F	56	6	12	44	6 - 8 years [b]
Mr. X	52	28	17	35	At least 7 years
Mr. I	32	21	16	16	8 years
Mr. D	45	21	16	29	At least 5 years
Mr. T	32	12	16	16	1½ years
Mrs. L	35	17	14	21	At least 2½ years [c]
Mr. E	48	37	17	31	9 months

[a] There may have been periods of time when patients were not strictly "available" for work, but this was not determined.

[b] Present period of unemployment only; total of past unemployment could not be ascertained.

[c] During part of the time calculated as "unemployment", this patient was supported by her husband, or not interested in full-time employment.

As was found in the Gordon and Russell study, the percentage of working years spent in unemployment did not appear to be related to duration of the illness. Patients in Group A (Employed) were unemployed for a much lower percentage of their available working years after seizure onset, than were patients in the Unemployed Group.

Seizure Frequency

Table 8 depicts the relationship between frequency of seizures at the time patients in Group A (Unemployed) were last employed, their present seizure frequency, and duration of unemployment. Also shown is the present seizure frequency of patients in Group A (Employed) and the length of time that these four patients have been in their present jobs.

Group A (Unemployed): According to Table 8, all six patients in this Group were having seizures during the period that they were last employed. However, two patients, Miss W and Mr. X, were experiencing only nocturnal seizures. Three patients, Mr. O, Mr. F, and Mr. I, reported a frequency of 3 to 6 seizures per day while in their last jobs, a frequency which might well have had impact on their work situation. Mr. A had suffered three seizures, all of them at work, during a 6 months' period of employment.

Three patients in this Group denied that they worried about the possibility of a seizure occurring at work when they were last employed; two of these three patients were experiencing only nocturnal seizures. The other three patients admitted they had worried that a seizure might occur at work.

Present frequency of seizures for this Group ranges from no seizures to six minor seizures per day. The patient with the highest frequency is Mr. F. Miss W, Mr. O and Mr. X suffer only highly infrequent nocturnal seizures. Both Mr. A and Mr. I, as the Table indicates, have been free of seizures for one-and-one-half years.

TABLE 8

RELATIONSHIP BETWEEN SEIZURE FREQUENCY DURING LAST EMPLOYMENT, PRESENT SEIZURE FREQUENCY, AND DURATION OF UNEMPLOYMENT/EMPLOYMENT OF 10 PATIENTS IN GROUP A

Case	Frequency of Seizures During Last Employment	Present Seizure Frequency	Duration of Unemployment - Group A (Unemployed)	Duration of Employment Group A (Employed)
Mr. A	4 - 6 per year	None for 1½ years	5 years	. .
Miss W	6 per year, nocturnal only	Same	3¼ years (with exception of 6 weeks employment)	. .
Mr. O	4 - 6 per day	Infrequent, nocturnal only	4 years	. .
Mr. F	3 - 6 per day	Same	6 - 8 years	. .
Mr. X	Not reported, nocturnal only	Unable to state	4 years	. .
Mr. I	4 per day	None for 1½ years	8 years	. .
* Mr. D	No data	None for 4 years	. .	14 months
* Mr. T	" "	None for 3 years	. .	3 years
* Mrs. L	" "	9 per year, usually nocturnal	. .	14 months full-time (4 years part-time prior to this)
* Mr. E	" "	None for 1½ years	. .	6 months

* Group A (Employed)

Group A (Employed): During the period when the four patients in this Group were unemployed and attempting to locate work, three were seizure-free, and one experienced a minor seizure approximately every six weeks. These data continue to hold in respect to the present seizure frequency of this Group.

Only the patient, Mrs. L, whose seizures are not under complete control admits to worrying about the possibility of experiencing a seizure at work. She reported that when this has occurred in the past she has merely commented to other employees that she was "thinking about something", in order to explain her inattentiveness.

Inspection of Column 3 in Table 8 indicates that patients who are now working have been free of seizures for longer periods than patients in the group who remain unemployed. With the possible exception of Mr. F, who claims he experiences 5 to 6 minor seizures per day, no patient in Group A (Unemployed) could be considered disabled for work by present seizure frequency, especially in view of the fact that several patients in this Group experience only nocturnal seizures.

There appears to be some disagreement among authors of recent studies in respect to the relationship between frequency of seizures and the social and occupational adjustment of seizure patients. At least one writer [1] considers frequency and timing of seizures of utmost importance in determining employment adjustment. Contrary to common sense

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[1] Goodglass, op. cit., p. 323.

expectation, findings in several other studies indicate that frequency of seizures has no bearing on the presence or absence of employment problems. [1, 2, 3]

Employer's Knowledge of Patients' Seizures

Eight of the ten patients in Group A did not inform prospective employers of their seizures. The remaining two patients did not develop seizures until after they had become established in their last position.

Group A (Unemployed): Of the six patients in this Group, Mr. O had onset of seizures after he had obtained his last job, and Mr. X experienced only nocturnal seizures which would not have posed a problem for him when engaged in daytime work. The four remaining patients asserted that they believed they would not have been hired if they had made their condition known to their prospective employer.

Four employers learned of patients' seizures during the course of their employment. Three became aware through patients' seizures at work. The fourth employer lived in the neighbourhood of his employee and in this way became aware of his seizures.

Group A (Employed): All four patients in this Group were of the opinion that they might have been rejected for their present positions if they had revealed the fact that they had seizures. Mr. T and Mr. E com-

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[1] Gordon and Russell, op. cit., p. 110.

[2] D.A. Pond and B.H. Bidwell, "A Survey of Epilepsy in Fourteen General Practices: II. Social and Psychological Aspects," Epilepsia, Vol. I (1959/60), pp. 385-393.

[3] D.W. Mulder, Proceedings of the Staff Meetings, Mayo Clinic, Vol. XXXIII (1958), p. 101.

mented additionally that it was "none of the employer's business" and they saw no reason to volunteer any more information than the prospective employer required.

Although none of the patients felt free to inform prospective employers of their seizure condition, all four in this Group indicated that any difficulty they experienced in the location of their present employment was not attributable to their seizures.

Only one employer in this Group learned of his employee's seizures subsequent to the latter's employment. He was informed by Mrs. W after she had had an outburst of temper, because she felt that she owed him an explanation for her behaviour. Mrs. L reported that her employer had not reacted negatively and has assured her that her revelation made "no difference whatsoever" in regard to her position. She has subsequently confided also in her employer's father who recently joined the firm.

Fellow Employees' Reaction to Patients' Seizures

None of the fellow employees of patients in Group A were aware of patients' seizures, with the exception of those who worked with three patients in the Unemployed Group who had suffered seizures at work. Mr. I and Mr. O reported that their fellow workers had been most sympathetic and had looked after them when seizures occurred. Mr. A was unable to report the reaction of other workers.

Seizures in Relation to Termination of Employment

Only two of the ten patients in the sample, Mr. O and Mr. E, indicated that termination of their last job was directly referable to their seizures. In only the case of Mr. O did the employer's final action seem to be perhaps unjustified. This patient had been employed with the same

company for six years when he developed increasingly frequent seizures. He was allowed to continue with this firm for four years after onset of seizures, although he was no longer able to work in the capacity of a machine operator. It will be recalled that he finally entered hospital for treatment and subsequently was not permitted by his former employer to return to work in any capacity, although his seizures were well-controlled.

Mr. E's seizures were responsible for the fact that he was unable to return to his former position as an elevator mechanic, after treatment at the Allan Memorial Institute, only because his doctor sent his employer a discharge summary indicating that Mr. E. should not be permitted to work in elevator shafts until he had been seizure-free for a longer period of time.

A third patient, Mr. A, hinted when pressed by the interviewer that his seizures might have been a factor in his dismissal but declined to state whether he believed this to be the case. Miss W stated that her seizures were one of her own reasons for leaving her last job in the sense that working "made her nervous" and that this mental state then increased the frequency of her seizures.

All other patients denied that their employer's knowledge of their seizures had been in any way a factor in the termination of their last employment. It is interesting to note, however, that an MNI psychiatrist who knew Mr. X well stated that it was his impression that this patient had been fired because of his seizures and not because of the "disagreements with his supervisor", as reported to the interviewer.

In summary, it would appear that the need to deny that there is prejudice because of seizures is operative in some patients, while others find it more acceptable to attribute dismissal from employment, lack of friends, and other social difficulties to the condition itself. It would appear also that employers and fellow employees of patients in this Group showed considerably more understanding and latitude in regard to patients' seizures than is usually assumed to be the case.

Clinic Attendance in Relation to Employment

Since attendance at Neurology Clinic could easily consume the better part of an afternoon, the researchers were interested in determining how patients handle the necessity to keep regular Clinic appointments when they are employed.

Two of six patients in Group A (Unemployed) and three of four in Group A (Employed) reported that their employers gave them time off to attend Clinic. Four of these seven patients, however, disguised the nature of their use of the time provided by their employer. The employer of the fifth patient, Mr. O, was aware of his seizures and the patient therefore did not attempt to dissemble the fact that he was attending Neurology Clinic.

Of the two patients in the Unemployed Group who were not allowed time off, one arranged her appointments for her day off and one enlisted his aunt to call at the Clinic for his prescriptions. The remaining patient in the Employed Group attends Night Clinic. Only Mr. I was unable to state what arrangements he made, but did comment that his employer gave him extra sick leave when it became necessary for him to enter hospital.

As will be discussed more fully in a later section of this Chapter, most of the patients presently attend Clinic only once in 3-6 months, although more frequent attendance might have been required of them at the time of their initial contact with the Clinic.

Location of Employment

It appeared important to the researchers to obtain information regarding both the methods patients in this sample use in the location of employment and the amount of effort they are willing or able to expend in so doing. The researchers were also interested in gaining an impression as to whether there was any evidence in Group A of a decreasing drive to locate employment and a tendency to become resigned to the status quo.

Group A (Unemployed): Four of the six patients in this Group indicated that they were interested in finding another job when their last ended. Mr. I and Miss W both asserted that for medical reasons they intended never to work again. Miss W had left her job because of gynecological complaints and stated also that she had more frequent seizures when working because the latter made her nervous. Mr. I stated he "feels better" when not working. He commented also that he would lose his pension if he were to return to work.

Patients in this Group were asked also what they had done in the period immediately following the termination of their last job. Mr. A and Mr. F had begun looking for another position directly. Mr. O and Mr. X had been hospitalized, the latter for a "liver ailment". Miss W had moved in with her sister and taken up oil painting to fill her time. Mr. I was unable to state what he had done except that he had been seeing an MNI social worker regularly.

The four patients who were interested in finding work have made applications to various firms. The number of applications, as reported by patients, varied from several to several hundred. All reported difficulty in finding employment.

The causes of difficulty vary, and range from lack of experience to lack of self-confidence. Mr. O, who had worked for ten years as a machine operator, is seeking work as a shipper and states that he has been told everywhere he has applied that a minimum of two years experience is required for this work. Mr. A cites lack of education as the main drawback to his finding employment. He is looking primarily for office work for which a high school education is required; he has worked briefly as an accounting clerk although he completed only 8th grade. He has also investigated training for several trades, such as vending machine repair, but claims that here again, 9th grade education is a minimum requirement.

One patient, Mr. F, claims to be looking for work but goes about it in what would appear to be a rather self-defeating manner. This patient stated that he usually applies through the National Employment Service - where it is recorded that he is an epileptic. In his opinion, he then stands no chance of being hired as, "When you're an epileptic they refuse you everywhere." He is also very much afraid of working anywhere where he would be exposed to the observation of other employees in the event of a seizure occurring. In his own mind, the lack of privacy in most factories constitutes an obstacle to his employment.

The fourth patient in this Group, Mr. X is looking for another position as a watchman but finds that such situations are scarce. He is of the opinion that his record of seizures follows him and that this is the major difficulty in his obtaining employment.

Two of the four patients in this Group who are definitely interested in employment consider seizures the main obstacle in the way of their getting suitable work. The two who did not cite seizures as the major obstacle did mention that it was very difficult to explain to a prospective employer, without his becoming aware of their condition, the long periods of unemployment they have had while their seizures had not been well controlled. One patient commented, "Is it better to let them know you have seizures or to have them think you've been in jail?"

It appears that in this Group seizures come to the fore particularly in relation to the location of employment. Only Mr. O considers seizures a major factor in the termination of his last employment. All patients in this Group indicated that they do not inform prospective employers of their seizures. Yet, all four patients consider their difficulty in locating employment as referable to a greater or lesser extent to their seizures.

Group A (Employed): In Group A (Employed), two of the four patients had experienced difficulty in obtaining their present employment. Mr. D attributed his difficulty to not being able to speak French and to limited skill in the radio and television repair work for which he had trained. None of the patients in this Group attributed difficulty in finding work to their seizures, although two stated that they had become discouraged about their chances of finding employment when they saw the long lines of unemployed men at the Unemployment Office who were healthy and unhandicapped as far as they could determine.

Job Finding Techniques

Group A (Unemployed): All four patients in this Group who were interested in obtaining work reported that they had sought help through the Special Placements Division of the National Employment Service. Two patients, Mr. X and Mr. F, indicated that they used this source almost exclusively, with no results.

Mr. A reported that he divided the city into districts which he then covered on foot, making applications at likely places of employment. He also watches for newspaper advertisements and claims to have investigated every possibility for trade school training. He has recently made application to the Provincial Youth Board for entrance to their training program. Mr. O depends mainly on the investigation of advertisements.

With the exception of the National Employment Service, which all patients used, only Mr. A indicated that he had sought the help of any community agency in the location of employment. He had approached the Catholic Welfare Bureau to ask for help in completion of his education, but no aid materialized.

Three patients stated they had considered training for another type of work, but that nothing had come of this. Only Mr. A indicated that he had at one time considered moving out of the city to find work, but he did not do so.

Only one patient indicated that he had been looking actively for work in the month preceding the research interview. This was Mr. F, who stated that he had been looking not for formal employment but for odd jobs. Mr. O had last looked for work in early December, 1963; Mr. A stated with some embarrassment that he had last looked actively for work approx-

imately one-and-one-half years ago. Mr. X was unable to say when he had last made a job application. These data suggest that there is a tendency in this patient group for efforts at location of employment to subside. Factors contributing to this tendency would appear to include the impact of frequent failure of applications made to obtain work, lack of suitable job opportunities, and the passage of time - in varying combinations.

Group A (Employed): Patients in this Group were also asked to indicate the techniques they used to locate employment and how they had secured their present position.

Mr. E had not made any applications before obtaining his present situation. He reported that he had telephoned one other firm but changed his mind en route to the interview and returned home. He then telephoned an old friend, a superintendent of a company, with whom he had once worked as an electrician's helper and was given a job.

Mr. D made application through the National Employment Service and also applied by letter and in person to many firms. When he had virtually given up attempts to locate work, a relative told him of an opening and spoke to the management on his behalf.

Mrs. L had worked several years ago as emergency clerical help and met relatives of her present employer at that time. From them she learned of her present position which she filled on a part-time basis for several years before she was given the alternative of working full-time or leaving the firm.

Mr. T obtained his present job after applying to many other places of employment, located through the telephone book. He also travelled to Toronto in search of work, but did not accept a job offered him there

The main source of income of the four patients in Group A (Employed) derives from patients' own employment. The range of gross income for this Group is from $200 to over $400 per month, the average weekly income being approximately $72.00.

During a period of Mrs. L's unemployment she received alimony payments, but these have been discontinued. Mr. T, during his previous unemployment collected Unemployment Compensation and performed part-time work of various kinds. This patient maintained that he had had a better income during his "unemployment" than his present employment provides. During his period of unemployment he obtained an informal contract to paint houses which eventually required the employment of a helper to assist with the volume of business. Although he earns $317 per month, Mr. T is currently looking for an additional job as janitor of an apartment building to supplement his present income.

Mr. E managed during his unemployment by the collection of Unemployment Compensation for one month, followed by the regular receipt of two-thirds of his previous pay through an insurance policy.

None of the patients in Group A who are or were married indicated that their wives had worked to support the family during their unemployment, with the exception of Mr. D. This patient's wife went to work to support the family before Mr. D obtained his present employment and continues to be employed.

In summary, income for patients in Group A (Unemployed) is hardly above the barest subsistence level, while that for Group A (Employed) compares well with the average of the population.

Summary

Subsequent to the selection of the sample it was found that Group A consisted of two subgroups. Group A (Unemployed) includes six patients who have been unemployed for six months or more. Group A (Employed) is comprised of four patients who were unemployed for varying periods but who are presently employed.

In Group A, five of the ten patients are, or were, employed in white collar or skilled occupations. One of the five remaining patients was employed in semi-skilled work and four in unskilled types of work. All four of the latter remain unemployed.

Termination of the positions held last by six patients appears to be referable, directly or indirectly, to the personality characteristics of these patients. The employment of two patients terminated because of seizures. The two remaining patients were laid off.

The attitudes of all patients towards present or previous jobs and their compliance with the demands of employment were for the most part very good. Patients expressed few dislikes related to their work and only three of the ten patients expressed a mild preference for another type of work. Two of these patients are presently employed and the third declined an opportunity to work in the preferred occupations. Only one patient encountered any problems at his previous place of employment. Half of the Group had made particular friends at work, four of these patients being in the Unemployed Group. The question may be raised as to the possibility that there may be a subtle bias in the answers of unemployed patients, which represents either an idealization of their previous work situation, or more probably, a conscious or unconscious attempt to appear "adequate" to the interviewer in their attitudes towards employment. Com-

parison of unemployed and employed patients within Group A suggests that relationships with other employees and job-related likes and dislikes (as reported by patients) have no bearing on current employment status.

The six unemployed patients in Group A have been out of work, on the average, for over five years. Two patients are not interested in obtaining employment. Those patients in Group A who are now employed have had much briefer periods of unemployment than the unemployed patients. Unemployed patients see lack of education, lack of experience, and their record of epilepsy as major obstacles to the location of suitable work. Their efforts to locate employment have lessened during their unemployment period. Patients in Group A (Employed) do not attribute difficulty in obtaining their present employment to seizures.

The usual range of resources (such as newspaper advertisements, tips of friends, etc.) and job finding techniques were used by Group A patients. Many patients used the National Employment Service but none have obtained positions through this source.

Income for the six unemployed patients is barely at a subsistence level. Five of the six unemployed receive a Disability Pension. The sixth subsists on his mother's Old Age Pension. The income range for the four employed patients is comparable to the average income of the general population.

The mean age at seizure onset for Group A is 21 years. Average duration of seizures for the Group is 22.5 years. Within the Group, these two factors do not appear to be related to employment adjustment.

CHAPTER IV

SOCIAL AND ENVIRONMENTAL HISTORY

To obtain information of possible relevance to the employment experiences and present employment status of patients in the sample, a section of the Questionnaire is devoted to selected aspects of the patient's social and environmental history. The research findings for Group A are presented in this Chapter under the following headings:

The Family's Influence upon Patient's Employment

Marriage

Friendships, Community Contacts and Use of Leisure Time

Patient's Evaluation of Seizures as a Handicap

Interviewer's Impressions of Personality and Employability of Patients

Clinic Contacts

The Family's Influence upon Patient's Employment

The researchers were interested in investigating the association, if any, between the employment experiences of this sample of seizure patients and those of their families. This interest was based upon the assumption that the father's occupation, and more particularly his level of employment and work record, would have served as a role model for the patient.

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Work Records of Fathers and Siblings

With two exceptions, all patients in Group A reported that their fathers and siblings had always been steadily employed. Mr. O's father was physically incapacitated at an early age and had never been employed, and the brother of Mrs. L had been disabled for work as a result of an automobile accident.

It is of interest to compare the level of occupational skill of patients' fathers with that of patients themselves. These data are shown in Table 9.

From this Table it appears that, in general, the occupational level of the fathers tends to be slightly higher than that of the patients. Four of the patients are unskilled, compared with only one of the fathers. Although Table 9 is based only on the last job held by patients, an inspection of each patient's total employment history indicates that the level of this last job is representative of all previous positions. An examination of each case also reveals that no correlation exists between the occupational level of individual patients and that of their fathers. All 5 patients in the semi-skilled and unskilled categories are in the Unemployed Group.

Several patients had changed their type of work frequently, but only 1 had experienced a temporary retrogression in occupational level directly referable to seizures.

TABLE 9

OCCUPATIONAL LEVEL OF FATHERS AND PATIENTS

Occupational Level	Number of Fathers	Number of Patients
Total	9*	10
White collar	1	3
Skilled	3	2
Semi-skilled	4	1
Unskilled	1	4

* Mr. O's father was not employed.

Table 10 shows the occupations of both fathers and patients and also the patients' early occupational ambitions. Only 5 patients could recall any specific aspiration. Of these 5, 2 would have been prevented by their early seizure onset from entering their chosen occupation. Mr. F commented rather bitterly on the disbarment of persons with epilepsy from the Catholic priesthood, which had been his early vocational choice. There did not appear to be any correlation between age at seizure onset and the presence or absence of early occupational ambitions.

The approximate average at which the 10 patients in Group A commenced full-time employment was 16. Attitudes of patients' parents toward their becoming employed varied. Two patients began work despite parental wishes that they remain in school. Parents of 2 other patients encouraged them to remain in school, but allowed them to undertake employment because of the family's need for additional income. Parents of 4

TABLE 10

OCCUPATIONS OF 10 GROUP A PATIENTS AND THEIR FATHERS, PATIENT'S EARLY OCCUPATIONAL AMBITION

Case	Father's Occupation	Patient's Occupation	Patient's Early Occupational Ambition
Mr. A	Millwright foreman	Accounting clerk	RCMP, Air Force
Miss W	Farmer	Cafeteria tray girl	"Didn't have time to think about it, had too many seizures."
Mr. O	Not employed	Machine operator	Aviator
Mr. F	Gardener and store-keeper	Cleaner	Roman Catholic priest
Mr. X	Barber	Watchman	No data
Mr. I	In tram company manager's office	Cleaner at tram company	"Never thought about it"
* Mr. D	Painter and tram-worker	Bank messenger	Unable to remember
* Mr. T	Machine operator	Steamfitter	"Never thought that far ahead."
* Mrs. L	Miner	Clerical work	"Marriage and family"
* Mr. E	Newfoundland fisherman	Electrician and elevator maintenance (now doing general work)	"To come to Montreal and enter brother's trade."

* Group A (Employed)

subjects showed no opposition and in 2 instances, patients were urged by their parents to obtain full-time employment.

From the foregoing data it appears that, with one exception, fathers of patients in this Group provided adequate role models in the area of employment.

From the foregoing data it appears that, with one exception, fathers of patients in this Group provided adequate role models in the area of employment. As already indicated, Mr. O's father was never employed due to a leg injury. This would not appear, on the surface, a sufficiently severe disability to explain total absence of gainful employment. Altogether, it would not appear that the employment difficulties of this Group are referable to the role models provided by fathers and siblings. In addition, no unusual elements of overprotection were evinced by patients' parents in relation to their moving out into the community to undertake employment. Here again, however, it must be borne in mind that for approximately half of Group A, seizures began after patients had commenced work. Consequently, seizures were not a factor in parental attitudes.

Parental Overprotection and Age of Onset

Because of widespread evidence that many parents of "handicapped" children misguidedly shelter and restrict them unduly from normal contacts with other children and from activities involving rough play or a measure of independent action, items 97 and 98 on the Questionnaire [1] were included as a crude measure of parental overprotection towards patients in the

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[1] Appendix A.

sample. It was speculated that the existence of this tendency could well affect a patient's later employment adjustment.

Table 11 records the responses of 8 [1] Group A patients to the items just mentioned. It is obvious from the Table that parents of this sample did not show any unusual tendency to restrict patients' activities and social contacts. The only area in which most of the patients were restricted was "staying out late at night," which may be judged to be a fairly universal parental prohibition. It is difficult to be sure, however, in view of the small number of patients to whom the Questionnaire was administered, that these 2 items are measuring what they purport to measure.

Present Relations with the Family of Origin

The following data suggest that there is little opportunity for the majority of patients in Group A to depend heavily on their parents' support:

Both parents living 1

Both parents living,
but separated 1

One parent living
mother 3
father 1

Both parents deceased 4

Only 2 patients share a household with a parent; these 2 unemployed men live with their widowed mothers. The number of siblings living in Montreal ranges from 0-6, the average being 4. Two patients share a household with one or more siblings. All 4 patients who live with parents or siblings are unemployed.

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[1] No data were obtained for Miss W and Mr. X.

TABLE 11

DEGREE OF PROTECTIVENESS SHOWN BY PARENTS TOWARDS 8 GROUP A PATIENTS DURING CHILDHOOD AND ADOLESCENT PERIODS, IN RELATION TO AGE OF SEIZURE ONSET

	Activities	Parental Attitude								
		Parents Restricted Patients			Parents Did Not Restrict Patients			Patients Could Not Recall or Had Not Taken Part in Activities		
		Age of Onset in Yrs.			Age of Onset in Yrs.			Age of Onset in Yrs.		
		0-10	11-20	21-60	0-10	11-20	21-60	0-10	11-20	21-60
	Number of Patients	1	3	4	1	3	4	1	3	4
As Children	Riding a bicycle				1	3	4			
	Playing active sports				1	3	4			
	Playing with other children				1	3	4			
	Playing away from home			1	1	3	3			
	Belonging to any clubs or gangs				1	3	4			
	Staying overnight with friends		1	2				1	2	2
As Teenagers	Going out with boys/girls on dates			1	1	3	3			
	Staying out late at night	1	2	3		1	1			
	Staying overnight with friends		1	1	1	1	1		1	2
	Playing active sports				1	3	4			
	Getting a job			2	1	2	3			
	Driving a car		1			1	3	1	1	1
	Moving away from home			1	1	2	3		1	

Patients' contacts with their family varies from several telephone calls per day to yearly contact only. Seven patients indicated that they are in touch with family members at least weekly and usually more often. There is no discernible difference in the frequency of family contacts between patients in Group A (Unemployed) and those in Group A (Employed).

Six patients indicated that they get on reasonably well with other family members and have no particular problems in their relationships with them. Two patients in the Unemployed Group reported that they do not get along with <u>most</u> members of their family and 2 in the Employed Group indicated that they are able to get along only with <u>some</u> family members. One of the latter is Mr. E, who reported that he sees his 2 brothers only yearly because they both drink heavily and have resisted his attempts to "reform" them. The reader may recall that Mr. E himself had been a chronic alcoholic for more than 10 years and has just recently been rehabilitated.

Mr. I reported frequent quarrels with 1 of his brothers. He claims to be on friendly terms with the sister with whom he is presently living, but reports she is negotiating to have him placed in a foster home. This patient, in the course of the interview, made several remarks to the effect that his mother, with whom he lived until her death one year ago, was the only member of his family who could "manage" him.

Mr. F stated that he does not approve of some of the activities of other family members. Mrs. L quarreled with her mother about the patient's dating outside her religion to the extent that she found it necessary to move away from home. Now that they live apart, however, their relationship has improved and they are in frequent contact.

In summary, 4 patients have problems with their families serious enough to cause varying degrees of alienation. This would seem a rather high incidence of family problems in a sample of this size. The remaining patients appear to derive some measure of companionship and support from contact with members of their family of origin.

Marriage

The advisability of marriage is usually a matter of concern for most persons who have a history of seizures. The extent to which it proves an acute problem varies, of course, with the degree of acceptance of self and illness by the individual before he is faced with the decision to marry. It is also conditional, obviously, upon the attitude of a prospective spouse towards the patient's epilepsy.

Even for those whose seizures begin after they marry the condition poses an added burden on the marriage, as would any chronic illness, and certainly constitutes a potential economic hazard for a married man.

The desirability of having children in the marriage also comes into question in many cases. Because of the widespread, popular belief that <u>all</u> seizures are genetically determined, many patients who suffer from a convulsive disorder which is not genetically determined abstain from marriage or from having children on the false assumption that their condition would inevitably be transmitted to offspring. These fears are often unjustified since only a small percentage of convulsive disorders are of genetic origin.

In the light of these considerations and especially since several recent studies, including that of Wilson, Stewart and Parker, [1] report a high degree of correlation between good marital adjustment and good work adjustment, the present investigators were interested in obtaining as much information as possible in regard to the marital history and adjustment of patients in both Groups A and B.

In Group A, only 2 patients, both in Group A (Unemployed), have never married. Only 4 of the remaining 8 patients remain married. These 4 patients have been married for periods ranging from 9 to 29 years. Only 1 of these latter patients is in the Unemployed Group. Two married well after onset of seizures and 2 developed seizures after marriage. When questioned as to the existence of problems in their marriages, all 4 asserted that they are very happy with their wives and have no marital problems. Mr. E did admit that during the years he had been drinking heavily his relationship with his wife had been very poor, but reasoned that this was because he had been incurring liquor bills and other debts which she had had to assume.

Of the 4 patients who are now separated, 2 married after seizure onset, 1 before onset, and the fourth reported that he developed seizures "around the time of his marriage". As might be anticipated, these 4 patients indicated that there had been a variety of problems in their marriages. Mr. I reported that he had known his wife for only two months before they married because she was pregnant, and that they had never had

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[1] Wilson, Stewart, and Parker, op. cit., p. 313.

a good relationship. He indicated that she had been very jealous of him, that they had quarreled continuously, and that he had drunk heavily during the time they were married. Although he has not seen his wife for a number of years, he claims she is having him "followed".

Mrs. L separated from her husband after six months of marriage because in the brief periods he was at home from sea duty with the Navy he had, ostensibly, drunk heavily and kept company with other women.

Mr. O reported that his marriage had been happy until he began to have seizures. At onset at age 25 he had suffered only nocturnal seizures, which his wife had been able to tolerate. When he began to have daytime attacks, however, his wife "became ashamed of him" and eventually left him and their 3 children for another man.

Mr. F blamed his marital difficulties on the fact that his wife had brought her sister to live with them. This caused considerable friction between them. He admitted also that he has a "terrible temper" and would not blame anyone for being unable to live with him. This patient reported also that he is estranged from all 6 of his children to such an extent that they seek him out only when his signature is required for a legal document.

Two of the separated patients have no children. The average number of children for the 6 remaining patients who married is 3.5.

The 2 patients who remain single both asserted that they have seriously considered marrying. Miss W was engaged at one time to a man who had a terminal illness and died before they could marry (this information verified by MNI Social Service records). The other single patient, Mr. A, reported rather halfheartedly that he wished to locate employment before he thought seriously of marriage. One rather received the

impression, however, that he had not much interest in becoming acquainted with possible mates. This patient lives with his mother and earlier had refused to leave her when placement at Dieppe House had been suggested. Miss W also lives with a member of her family.

These 2 cases would seem to correspond with the findings of Goodglass et al that there is a small population of well-controlled seizure patients who remain, for the most part, unmarried, continue to live with the family of origin in a protected atmosphere, and accept a dependent role.[1] It must be noted, however, that Mr. A is presently only 29 and it is, therefore, perhaps early to predict his future course in regard to marriage.

In summary, data pertaining to patients' marital experience reveal a very high (50 per cent.) rate of outright marriage failure. Only 1 failure was attributed partially to the role of seizures. Although it is not possible to generalize because of the size of the sample, it would appear that in so far as the Group of 8 patients who married are concerned, there seems to be no relationship between the success or failure of their marriages and whether seizure onset was prior to or following marriage.

Three of the 4 patients who remain happily married are presently employed and have the briefest periods of unemployment recorded for the sample. This finding agrees with that of Wilson et al with respect to the existence of a high degree of correlation between marital and work adjustment.[2]

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[1] Goodglass et al, op. cit., p. 337.

[2] Wilson et al, op. cit.

Friendships, Community Contacts, and Use of Leisure Time

Since seizures present a problem for the sufferer, particularly in regard to association with others, who may be unaccepting of the condition and its manifestations, the researchers were interested in ascertaining whether this sample of patients with employment problems had experienced any particular difficulty in making and retaining friendships and other contacts with the community at large.

Five subjects in Group A, 3 of whom are unemployed, indicated that they have no friends in Montreal. The remaining 4 [1] patients claim close friendship with persons in the city. Two are in daily contact with their friends and 2 others see friends 2-3 times per month. These 4 patients met their friends through Alcoholics Anonymous, early school associations, neighbours, and previous jobs, respectively.

Of the 5 patients who indicated that they no friends, when questioned further, 1 asserted that he is friendly with neighbours, 1 claimed friendship with a distant relative, and 1 indicated that his 2 brothers-in-law are the only people with whom he is friendly.

Nine of the 10 patients maintained that most of their friends and acquaintances are steadily employed.

Patients were questioned also in regard to their friendships during childhood and adolescence. No particular pattern emerged from data obtained in relation to these questions. Some had had close friends as children and had engaged only in group activities as adolescents. For

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[1] No data obtained for Mr. X.

others, this pattern was reversed. Only 1 patient, Miss W, who had lived on a farm until age 23, indicated that she had never had any friends, except at school. She added that she is, in this respect, like her sister who has lived upstairs over another tenant for 15 years and has yet to speak to her.

It was anticipated that especially in the Group with the longest duration of unemployment there might be a pronounced tendency towards social alienation, as is so often the case with persons who have physical or mental handicaps. This appears to be true for Group A. Five of the 9 patients for whom data were obtained appear to have no friends in Montreal and to be socially isolated. One might speculate that the personality factors responsible for the very high incidence of isolation in this Group of patients also contribute to their failure to find and retain employment.

Use of Leisure Time

Recreational activities were investigated as a measure of social participation and breadth of interest, and also to derive an impression of the daily activities of unemployed patients.

Table 12 details the major leisure time activities of Group A patients. Activities listed for Group A (Unemployed) as "usual activities" are those mentioned by patients as their habitual daily activities.

It is evident from the Table that patients in this Group enjoy a range of activities and interests not different from non-epileptics. Five of the 9 patients indicated that they have a special interest or

TABLE 12

ACTIVITIES OF 9[a] SEIZURE PATIENTS IN GROUP A

Case	Marital Status	Usual Activities	Special Interests
Mr. A	Single	Walking around the city; talking with an aunt; reading; gym class	None
Miss W	Single	Domestic chores; oil painting; television	Oil painting
Mr. O	Separated	Reading; with friends; television	None
Mr. F	Separated	Listening to music; activities at La Ligue de l'Epilepsie meeting place; odd jobs for neighbours	Listening to opera
Mr. I	Separated	Hanging around beauty parlour talking to the operators; hanging out on street corner; movies; bowling; hockey games	None
* Mr. D	Married	Television, movie or walk with wife	Tinkering with radios
* Mr. T	Married	Television; activities with wife and children	Home workshop, at present has no equipment
* Mrs. L	Separated	Sewing and domestic chores; sees 1 friend for 5 minutes daily en route to work	None
* Mr. E	Married	Home workshop; with friends; AA meetings twice weekly; family activities	Home workshop

[a] No data obtained for Mr. X

* Group A (Employed)

hobby. Mr. A, who remarked that because of his unemployment he can no longer afford group activities such as bowling, appears to be suffering more "social dislocation" than any other patient in the sample.

To be noted is the preponderance of family activities listed by respondents in Group A (Employed). All 4 list "with family" as a leisure time activity, while only 1 in 5 does so in the other Group. This could be regarded as a possible further indication of the relationship between good marital and work adjustment already postulated.

Only 4 patients, 2 in each subgroup, indicate that they belong to organized groups in the community. Two are members of Alcoholics Anonymous. One of these patients, Mr. E, is secretary of one branch of this organization and has been instrumental in forming a chapter in his own neighbourhood. The second patient who attends AA is Mr. F, who belongs also to La Ligue de l'Epilepsie du Quebec. Mr. A attends a gym class and Mr. T is a member of both a bowling league and a church fund raising committee which sponsors an annual party for boys.

To be noted is the high incidence of alcoholism in this small sample. However, it is significant that both patients are active members of Alcoholics Anonymous and appear to have their drinking under good control at present.

Patients' Evaluation of Seizures as a Handicap

The patient's perception of the ways in which he has been handicapped by seizures was deemed an important area for investigation in that it could provide insight in respect to the impact of seizures upon the self image. To obtain this information, an open-end question was introduced at the end of the interview. In response to this question, patients

in Group A indicated that their seizures have been a handicap in one or more of the following ways:

Nature of the Handicap	Number of Patients
In relation to employment	8
Afraid of having seizure at work	2
Difficulty in obtaining work	3
Nature of employment open to them narrowed because of safety factor	3
In relation to marriage	3
Broken engagement	1
Reason for separation	1
Refused dates because of fear of attacks ..	1
In relation to schooling	3
Seizures affected ability to learn and remember	2
Thought other children laughing behind his back, didn't "fit in"	1
In relation to other areas	3
Misses being able to drive a car	1
Blames seizures for his "bad character" ...	1
Traumatic incidents, e.g. severe frostbite during episode of unconsciousness; inability to be roused when house on fire	1

One patient, Mr. I, stated that his seizures have been no handicap to him, but seemed to derive satisfaction that they had constituted one to his relatives who had had to assume responsibility for him. Miss W

commented in a cheerful tone that seizures had "spoiled her whole future", but otherwise had constituted no handicap.

Although patients in this Group perceive seizures as a handicap in many areas of their life space, it is to be noted that very few references were made to areas involving interpersonal relationships or self image.

Interviewer's Impressions of Personality and Employability of Patients

Because it was suspected, as stated in Chapter I, that personality could be the most important factor in the employment adjustment of patients in both Groups A and B, the researchers, at the conclusion of each interview, noted their impressions of the appearance, personality characteristics, intelligence level, cooperation, and general employability of each patient as revealed within the context of the interview.

All 10 Group A patients presented a good appearance. All were most cooperative and eager to provide the information requested. None indicated they thought the questions too personal. Although an attempt was made to eliminate from the sample patients who did not speak fluent English, the interviewer found it impossible because of communication difficulties to estimate the intelligence level of several patients. With the possible exception of Mr. X, however, all patients in Group A appeared to have sufficient intelligence to enable them to assume some type of employment.

It was apparent that most patients had personality problems. This impression was somewhat substantiated by a re-examination of the 1962 MNI study's completed Questionnaires, which indicated that 8 of the 10 patients had been referred at some time for psychiatric assessment.

The very high incidence in this sample of problems in respect to alcohol has already been mentioned. Mr. E and Mr. F are both active members of Alcoholics Anonymous and Mr. I indicated that at least during his last employment, he used alcohol to the extent that it interfered with his work. Goodglass, et al. report a similarly high incidence of alcoholism in a sample of epileptics in which 16 severe alcoholics accounted for one third of the unemployed patients.[1] A brief outline of the most striking features of each Group A patient's personality follows.

Group A (Unemployed): Mr. A exhibits tendencies of a somewhat passive aggressive personality, with symptoms of extreme helplessness, hopelessness, and thinly veiled anger at the world. His statements to the effect that he has applied for employment at several hundred places and been refused everywhere would not appear entirely credible. He suffers, in addition, from a most distracting speech mechanism which makes him appear mentally dull. After a few minutes' conversation this impression is mitigated, but it is understandable that a prospective employer could be put off by it. This patient lives with his mother and is supported by her meagre Old Age Pension.

Miss W appeared to the interviewer as an hysterical personality who has gone from one unfortunate situation to another. She had been placed in an orphanage at a very early age and was later re-claimed by her mother, who had remarried. This rather charming patient stressed her physical ailments - failing eyesight and gynecological problems -

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[1] Goodglass, et al., op. cit., p. 339.

laughed hysterically throughout the interview and gave consistently rather inappropriate responses to the questions asked.

Mr. F seemed a somewhat cantankerous, suspicious, crusty individual with a chip on his shoulder who is constantly expecting the worst from everyone. At several points during the interview, he doubled up his fists to show the interviewer that he could "fight anybody." He is estranged from his wife and six children and blames all of his difficulties on his seizure condition, which has "given him a bad character". He is extremely fearful of going out into the street, of coming for his Clinic appointments, etc., lest he be overtaken by a seizure in the street. He stated that "all jobs are too dangerous for an epileptic."

Mr. I has been diagnosed as a severe character disorder and the interviewer would agree with this assessment. There would seem no question but that he is totally incapacitated for work by his personality disturbance. Throughout the interview his responses were most inappropriate and bizarre, bordering on the psychotic.

Mr. O appeared on the surface to be an intelligent and sensitive individual, immobilized by the combined forces of onset of seizures at age 25, loss of the job he had held for 10 years, and the loss of his wife, who abandoned him for another man. Although on the basis of his good intelligence and previous excellent work record he would appear an excellent candidate for rehabilitation, it is to be noted that he has already had much service from the MNI Social Service Department and that he remains unemployed.

The sixth Group A (Unemployed) patient, Mr. X, appeared to have a low I.Q., in addition to emotional problems. Because of difficulty in

communication, the interviewer was unable to obtain a complete first hand impression of this patient and on this account referred to his medical record. Here it was indicated that the patient had been diagnosed as somewhat mentally retarded, with marked depressive tendencies.

Group A (Employed): Although the 4 patients in Group A (Employed) are working at present, marked personality difficulties were noted in this Group. Mrs. L appeared a very rigid, compulsive individual, isolated from friendships. This patient stated that she does everything in accordance with a fixed time-table, e.g. she performs the same chores on the same day of each week, takes her meals on an immutable schedule. However, she showed some warmth in the interview, takes pride in her work, and has been able to confide in her employer that she has seizures. This patient never knew her father, as her parents separated in her early childhood. Her present employer and his elderly father seem to be filling, according to the patient's statements, a "father substitute" role. This may well be one factor that has enabled Mrs. L. to remain in her present position for over 4 years, since her previous employment pattern seems to have been to leave most jobs after a short period. This was often because she disliked or could not get along with her employer or fellow workers.

Mr. E's present employment would appear to be the byproduct of successful rehabilitation combined with a good level of premorbid occupational skill. He continues to exhibit a marked tendency towards self-recrimination and self-confession. Throughout the interview, he could be directed away from the topic of alcohol and attendant problems only with great difficulty. He has remained employed with apparent success for the

last 6 months, however, and was rarely unemployed during the many years that he was drinking heavily.

The 2 patients who had not been referred by the Clinic for psychiatric assessment are Mr. T and Mr. D, although it would appear that both patients have some degree of personality difficulty. Mr. D appeared a very passive individual with feelings of inadequacy who had been carried along by his wife and relatives. Supported by a government grant, he trained for a trade, but states that he could not withstand the pressure of competition to produce work rapidly, so gave up this type of work. During a three year period of unemployment his wife worked and supported the family. She also obtained a temporary job for him at her place of employment. Another relative was instrumental in obtaining his present job for him, after he had given up trying to locate work on his own. He has no friends and depends solely on his brothers-in-law for companionship.

Mr. T seems to have made an excellent adjustment to both employment and marriage. He gives the impression of being rather immature in many ways, however. For example, as a reason for seeking a second job he stated in all seriousness that he would then be in a better position to make his brother-in-law even more jealous of him than he is at present. This patient seems to have a pronounced drive to "prove himself" and this undoubtedly has contributed to his employment.

In summary, it would appear that personality difficulties are present in both Group A (Unemployed) and in Group A (Employed). In Group A (Unemployed), the nature of the problems appears to be such that it is difficult or impossible for these patients to adapt themselves to regular employment.

Clinic Contacts

Treatment at MNI Clinic

Patients in Group A have been in contact with the Clinic from 1 to 23 years, the mean duration being 13 years. Nine of the 10 patients have been followed for a minimum of 8 years. It might be concluded that this Group of patients has been receiving treatment for periods sufficiently long that they have derived maximum benefit from modern medication and management.

It was impossible to relate age of seizure onset to the time of initial contact with the Clinic because half of the sample had been treated elsewhere for varying periods. Six patients were directed to the Clinic by relatives or friends. One patient was referred by another hospital where he had been examined during a "nervous breakdown", and one was referred from the Gaspe by his family doctor. Another patient had been treated unsuccessfully for "an enlarged heart" by a private physician who finally referred him to the Clinic. A tenth patient was compelled by his trade union to be examined at the Clinic following a seizure on the job.

Present Clinic Contact

Five patients attend Clinic at 6-month intervals, 4 others - every 3 months. Mr. E no longer attends Neurology Clinic but is seen regularly at the Allan Memorial Institute Alcoholic Clinic, where his anti-convulsant medication is administered. There appears to be no significant difference in the frequency of Clinic attendance for the Employed and Unemployed patients.

An attempt was made to gain an impression of the patients' perception of the Clinic and its specialized functions and to apprehend any differences in the manner in which Groups A and B make use of the services offered. The researchers speculated that patients in Group A might exhibit more dependency on Clinic personnel or on the Clinic itself. Data for Group B are presented in Chapter VI.

The major reason given by most (7) patients for their regular attendance at Clinic was to obtain their medication. The other 3 patients were more interested in "talking to the doctor". Table 13 shows that expressions of negative feelings towards the Clinic by patients in Group A were minimal. Only 2 patients indicated that doctors' advice had not been of assistance to them, 1 that coming to Clinic had not helped him, and 4 that Clinic attendance is either too time-consuming or too troublesome. Five patients indicated that they "felt better" after seeing the doctor, regardless of whether any innovations in their treatment regime have been made, and 4 mentioned that they find talking to other patients helpful. The 4 patients who answered this last question in the negative indicated that they are fearful of being recognized by someone they know, or like to "mind their own business". Both reasons could be indicative of a measure of discomfort with their illness in regard to interpersonal relationships.

Medication

It was suggested to the researchers that seizure patients sometimes feel uneasy about taking their medication at work for fear of exposing their illness. However, in the group of 10 Group A patients upon which this Chapter is based, none reported that this had ever been a problem.

TABLE 13

ATTITUDES OF 9* GROUP A PATIENTS TOWARDS THE CLINIC, DOCTORS, AND MEDICATION

Attitude	Patient's Response		
	Agree	Disagree	Undecided
The medicine prescribed keeps me from having seizures	9	0	0
The doctors' advice has not helped me	2	7	0
I feel better after seeing the doctor	5	4	0
The doctors haven't really helped me	0	6	3
Coming to Clinic has not helped me	1	8	0
It is too much trouble to come to Clinic regularly	2	7	0
Attending Clinic takes too much time	2	5	2
Talking with other patients is helpful	4	4	1

* No data obtained for Mr. X.

All 10 patients maintain that they take their medication regularly. Only Mr. I admitted to decreasing his own dosage. Mr. E wanted it known that he takes his medicine faithfully at present, after discarding it for the first 7 years it had been prescribed for him.

The items in the Questionnaire that deal with cost of drugs and payment for them evoked considerable spontaneous response from the majority of patients in this Group. Two patients indicated that they are unable to

meet the cost of medication. One receives aid through the Social Service Department and the second a supplement to his Disability Pension. Several of those who reported that they are able to pay for their drugs qualified their answers to the effect that they are obliged to be able to meet this expense, although it seems impossible at times, because they are afraid to go without their pills. Most indicated they understand that they would have a return or an increase of seizures if their medication were discontinued.

Several patients, unsolicited, mentioned the price they pay for medication; these amounts vary widely. Three patients questioned the interviewer concerning the Clinic's rating system for the amount to be paid by each and commented rather resentfully that they often see other patients paying less than they. Two patients inquired whether the interviewer could have their rating changed so that they could pay less for their medication. One patient, now employed, commented that in the 20 years he has been treated at Clinic, the hospital never helped him with the cost of medication although he suffered many bouts of unemployment.

In summary, payment for medication constitutes a problem for many patients in the sample. This was also found to be the case in a recent pilot study of the medication payment problems of another small group of MNI seizure patients. [1]

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[1] Paul Mansfield, "Medication Payment Problems of Seizure Patients", unpublished Research Report, School of Social Work, McGill University, 1964.

MNI Social Service Contact

Nine of the 10 Group A patients have had contacts with the Social Service Department.[1] Three patients were self-referred, 3 were referred by a Clinic physician, 1 by a relative, and 1 by the Clinic clerk with whom he was arguing about payment for his medication. The following reasons for initiation of contact were noted:

Help with employment	1
Financial assistance	2
Cost of drugs	2
Support and reassurance	2
Discussion of personal problems	2

Patients were asked to state whether the contact they had with a Clinic worker had been worthwhile for them. Two indicated that it had not. Mr. A had not been satisfied with the social worker's attempts to influence him to go to Dieppe House, which had seemed an unsuitable plan to him. Mr. I did not trust the social worker and stated that she had asked him too many questions. Mr. F was ambivalent in regard to his contact. His view is that, "Sometimes they'll help you and sometimes they won't; sometimes they take a dislike to a person and then they won'd do anything for him." This, coupled with other evidence, seemed reflective of this patient's generally sour view of life.

Two patients, Miss W and Mr. D, indicated that their contacts had been very much worthwhile in that it had "helped them just to talk to someone." Mr. O had been assisted with arrangements for placement of his 3 children and had also been a member of the therapy group for discussion

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[1] Mr. E's contact is with an Allan Memorial Institute social worker.

of seizure patients' problems. Mrs. L and Mr. X also indicated satisfaction with the service they had been given and Mr. E stated that his contact with an AMI social worker had "changed his whole way of life."

In summary, it is worthy of note that 9 of the 10 Group A patients were referred to Social Service. The 6 Unemployed patients have received varying amounts of service and 2 express dissatisfaction with what has been attempted for them.

Summary

With one exception, fathers of Group A patients appear to have presented an adequate role model in respect to employment. This group of fathers were slightly more skilled occupationally than the patients. No pattern of correspondence exists between the level of skill of individual patients and their fathers.

There is a striking absence of early occupational ambitions for this Group. Presence or absence of early occupational preferences did not seem to be related to age of seizure onset.

The average age at which patients began full-time employment was 16. Only 2 parents objected to patients' leaving school to undertake employment. No evidence of a tendency on the part of parents to overprotect patients was found.

About half the sample have one or more parents living. Four unemployed patients, 2 of them separated men, live with a parent or sibling. Four of the 9 patients (2 Unemployed and 2 Employed) for whom data were obtained report problems with family members resulting in varying degrees of alienation.

Four of the 8 patients who married are now separated. Failure of 1 marriage was attributed partially to seizures. Whether seizures developed prior to or after marriage would not appear to be an important factor in the success or failure of marriage for this small sample.

There tends to be a positive correlation between employment and marital adjustment. Three of the 4 patients who remain happily married are presently employed and have had much briefer periods of unemployment than the other patients in the Group.

Five of the 9 patients for whom information was obtained appear to have no friends in Montreal and to be socially isolated. No pattern emerged from the research data in relation to patients' earlier friendships. Patients participate in a "normal" range of activities and 5 have a special interest or hobby. Several of the unemployed patients indicated that they have difficulty in filling their time. Employed patients appear to spend more time with their families than do the unemployed.

Eight of the 10 patients indicated that seizures have been a handicap to them in relation to employment. Three felt they were handicapped in relation to marriage, and 3 in respect to schooling. Few references were made to handicaps in the areas involving self image or interpersonal relationships.

It was apparent that most patients in Group A, both employed and unemployed, had personality problems. Eight patients had been referred at some time for psychiatric assessment. Two patients are alcoholics and a third reported that he drinks very heavily. The personality disorders of the unemployed patients appear to be interfering with their adaptation to gainful employment.

Nine of the 10 patients have been treated at the MNI Clinic for more than 8 years. Because many had initially been treated elsewhere, it is impossible to relate age of onset to initial application for treatment at the Clinic.

Presently both unemployed and employed patients attend Clinic regularly at 3-6 month intervals. Their major reason for attendance is to obtain medication. A smaller subgroup comes mainly to "talk to the doctor". Negative feelings expressed towards the Clinic were minimal. Four patients indicated that they never speak to other patients for fear of losing their anonymity.

All patients claim to take their medication regularly and none consider taking medication at work a problem. Cost of medication presents a problem, especially to the unemployed patients. Much resentment was expressed towards the presently operative payment rating system. All patients in this Group expressed a fear of discontinuing medication.

A rather high percentage of this Group (9) has been referred to Social Service. Only 2 have not found the contact helpful.

CHAPTER V

THE EMPLOYMENT EXPERIENCES OF AN EMPLOYED GROUP OF SEIZURE PATIENTS (GROUP B)

In this Chapter the employment experiences [1] of a Group of 15 seizure patients are examined and also the implications of seizures for their employment. The Group of patients to be discussed have been continuously employed for at least the past 3 years with the same employer or with 2 or more employers. Details concerning their age, sex, nationality, language, education, marital status, number of children in family or orientation and of procreation, birth order of children, nationality of patients' parents have already been discussed in Chapter II. The content of this Chapter is presented under the following headings:

(1) Present Employment Experience

(2) Implications of Seizures for Employment

(3) Previous Employment Experience

(4) Periods of Unemployment

Present Employment Experience

In this section the characteristics of the patients' employment, the location of this employment, and the patients' attitude towards their work are discussed.

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[1] Experience refers to the present job and the one held prior to it.

TABLE 14

DISTRIBUTION OF THE LEVEL OF PRESENT EMPLOYMENT OF 15 EMPLOYED SEIZURE PATIENTS

Level of Employment	Frequency	Percent
Total	15	100
White collar	4	27
Skilled	1	7
Semi-skilled	2	13
Unskilled	8	53

Characteristics of the Job

Types of work: Table 14 shows that more than half of patients are in unskilled types of work. This was also a finding in a study of 178 patients at the Montreal Neurological Institute in 1949. [1]

In Table 15 the occupations of this group are listed under each level of employment with the total number of patients in each particular occupation.

Earnings: In Table 16, which shows the distribution of weekly wages, there are 10 patients, or two-thirds of the group, within the $61.00 to $100.00 per week wage bracket. Only one of the patients is earning over $100.00 per week. The average weekly wage for the patients in Group B is $74.00 as compared to the average weekly wage of $84.00 for Montreal, $82.00 for Quebec and $85.00 for all Canada. [2]

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[1] Thomas and Davidson, op. cit., p. 38.

[2] Canada Dominion Bureau of Statistics, Canadian Statistical Review, Vol. XXXIX, No. 4 (Ottawa: Queen's Printer, April 1964), p. 19.

TABLE 15

CLASSIFICATION OF 15 SEIZURE PATIENTS ACCORDING TO LEVEL OF EMPLOYMENT AND SPECIFIC OCCUPATION

White Collar		
	Occupation	Number
	Advertising manager	1
	Shoe store manager	1
	Costing clerk	1
	Stenographer	1
Skilled		
	Occupation	Number
	Butcher	1
Semi-skilled		
	Occupation	Number
	Dispatcher	1
	Relay adjustor (factory)	1
Unskilled		
	Occupation	Number
	Labourer	2
	Cleaner	1
	Housekeeper	1
	Ward aid	2
	Truck driver (delivery)	1
	Station attendant	1

TABLE 16

DISTRIBUTION OF WEEKLY WAGES FOR 15 EMPLOYED SEIZURE PATIENTS

Dollars per Week	Number of Males	Number of Females
Total	11	4
21 - 40	1	1
41 - 60		2
61 - 80	5	1
81 - 100	4	
101 - 120		
121 - 140		
141 - 160	1	

The average weekly wage of each male patient in Group B is $83.00 and for each female patient it is $49.00.

In considering the average number of children, which is 2, and the average wage realized by the Group, it appears as though they are not suffering financially. There may be some financial difficulty for the 4 patients in the $21.00 to $61.00 income range.

Working hours and length of employment: The working hours of this Group range from 8 to 12 hours per day with an average of 9 hours per worker. Nine of the 15 patients have been employed with the same employer for 3 years or more. The length of their employment ranges from 3 to 18 years, with an average of 9 years of service per patient. This indicates an ability to hold a job and a willingness to work despite their handicap. Studies

of disabled workers indicate that as a group they are as productive as non-disabled workers if they are selectively placed.[1, 2] Six patients have been employed with two or more employers. The length of their employment with their present employer ranges from 3 months to 2 years, with an average of 7 months service per patient.

The 15 patients are employed in the following settings:

Employment Setting	Number of Patients
Publisher	1
Insurance company	1
Private home	1
Retail store	1
Meat packing plant	1
Factory	2
Airline	1
Contractor	2
Trucking firm	1
Public corporation	1
Hospital	3

Of the married patients in Group B only one has a marriage partner who is working.

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[1] Joan S. Clark, Disabled Citizens (London: George Allen and Unwin Ltd., 1951) p. 160.

[2] Thomas and Davidson, op. cit., p. 46.

Location of Employment

The researchers were interested in finding out just how the patients went about finding their present jobs. Question 20 in the Questionnaire asks, "How did you find your present job?" and "Tell me just how you went about it." The following information was obtained from these questions:

Location of Employment	Number of Patients	Action Taken
Through self	8	1 took courses and gained experience 1 had worked with his employer previously 3 simply made application and were accepted 1 took a civil service test before being hired 1 replied to newspaper advertisements 1 submitted applications until he found work
Through relatives	4	These patients simply applied once they knew of the opening and were accepted
Through social worker	2	These patients made application for jobs where the social worker fully explained their situation
Through friends	1	This patient simply applied once he knew of the opening and was accepted

All the patients stated that they experienced no difficulty in obtaining their present jobs. Despite this affirmation, 8 patients applied to from 2 to 25 or more places or an approximate average of 7 applications per patient. This suggests that some difficulty may have been experienced by these 8 patients but the question in the Schedule in regard to this matter did not evoke a response which brought out this difficulty. Seven patients stated that they had not applied for any job other than the one with their present employer.

Thus, from all indications, in this sample no major difficulty was experienced in the location of employment and most of the patients did not have to search too strenuously or for too long a period to find a job.

Only 4 patients in the Group were having seizures when they applied for their present jobs. The frequency of these attacks varied from once every two weeks to once every six years. Three of these patients have been in their present jobs for more than eight years and only one has worked for less than one year for his present employer. None of the patients attributed difficulty in locating their present jobs to seizures.

Attitude Towards the Job

The attitude a person has towards his work is an important aspect of the employment experience, as it is a reflection of his own performance as well as his own expectations of himself. In order to examine this factor, each patient was asked if he liked his present job and if there were any likes or dislikes he held for it.

Twelve of the 15 patients stated that they liked the type of work they were doing. The things they liked about their work included, "the fellow employees, being occupied, the challenge, the responsibility, being with other people, good security, the employer, and better pay." This group of 12 patients had few dislikes relevant to their work. However, 1 patient felt that he had been held back from promotion because of his seizures, and another indicated that she had a very controlling supervisor. Of the 3 patients who disliked their jobs, their main complaints were that the jobs were tedious, boring, and offered no challenge. Two patients maintained that they retained these jobs because of the difficulty in finding other employment when one had seizures.

Occupational preferences: When the patients were asked what other type of work they would prefer to be doing and the reason it was not undertaken the responses were as follows:

Number of Patients	Other Work Preference	Reason Why Preference Was Not Undertaken
Total 15		
6	None	Happy with present work
2	Salesman	No opportunity, lack of confidence
1	Previous work of fur blocker	Too old to keep up to the work
1	Previous work of waitress	Needed less demanding work due to a depression
1	Social worker	Finances
1	Television and radio repair	Finances
1	Painter	Refused at trade school due to seizures
1	Farming	No opportunity, poor paying
1	Carpentry	No opportunity

Relationship with employees: In respect to interpersonal relationships with their fellow employees, all patients stated that they got along, using terms such as "fine", "good", "very well" and that there were no particular problems. Eight patients stated that they had friends at work. An answer in the affirmative was explored by the interviewer to determine whether friendship implied contacts after working hours; this proved to be the case for only 3 of these 8 patients. Seven patients stated that they had no contacts at work. This is possibly an indication that some seizure patients may hesitate to move out to other employees.

Implications of Seizures for Employment

A number of studies [1, 2, 3] indicate that many patients with an onset of seizures early in life, have a poorer social prognosis than those whose onset is later. Pond and Bidwell, [4] in a study of 157 patients, reported that patients in whom epilepsy had developed during childhood or early youth had the greatest difficulties with employment. Thus, the age of onset of seizures would appear to be of significance in the employment of the seizure patient.

Table 17 shows the age of onset for the 15 patients under consideration in this Chapter. Seizure onset occurred before the age of 20 in the majority of patients. However, this Group does not conform to the findings in Pond and Bidwell in respect to the relationship between early onset and employment because they have experienced few difficulties in regard to employment. According to Table 17, the age of onset in this Group drops quickly after the age of 30.

Most authors [5, 6, 7] state that the age of onset is statistically most likely to occur before the age of 20. "There are two danger periods:

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[1] Mulder, op. cit., p. 101

[2] Juul-Jensen, "Epilepsy - A Clinical and Social Analysis of 1020 Adult Patients with Epileptic Seizures" p. 102.

[3] Lennox and Mohr, op. cit., p. 257.

[4] Pond and Bidwell, op. cit., p. 387.

[5] Thomas and Davidson, op. cit., p. 10.

[6] Samuel Livingstone, Living With Epileptic Seizures. (Springfield, Illinoix: Charles C. Thomas, 1963), p. 9.

[7] G. W. Lennox, Science and Seizures (New York: Harper and Brothers, 1941), pp. 58, 76.

TABLE 17

AGE OF ONSET OF SEIZURES IN 15 EMPLOYED SEIZURE PATIENTS

Age in Years	Number of Patients	Percent
Total	15	100
0 - 5	4	27
6 - 10		
11 - 15	3	20
16 - 20	3	20
21 - 30	2	13
31 - 40	2	13
41 - 50		
51 - 60	1	7

one during the first year or two of life and the other during the period of adolescence." [1]

Wilson, Stewart and Parker [2] suggest that onset of seizures in adulthood may be extremely disabling. However, it would not appear that 5 patients in Group B, whose onset occurred over the age of 20, have been any more handicapped than patients whose onset occurred under the age of

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[1] Lennox, op. cit., p. 58.

[2] Wilson, Stewart and Parker, op. cit., p. 311.

twenty. With such a small number of patients in the study the significance of this finding is difficult to assess.

Time of last seizure: In Table 18 is shown when the patients last had a seizure. As indicated in Chapters I and II, Sample B was selected from patients whose seizures were under complete control, or had nocturnal seizures only, according to the 1962 study of 500 patients at the MNI. However, information obtained during the present study indicates that 4 patients have had minor seizures within the last year and 1 within the past 2 years. Thus, at least 5 patients in this Group are not under complete control at present. In addition, 2 patients have nocturnal seizures only. It would appear that even though 5 have had recent daytime seizures their work situation has not been affected by them. Also to be noted is that the patients among these 5 who have changed jobs within the last year apparently did not lose their previous jobs because of seizures.

Employers knowledge of the seizures: When the patients in this Group applied for their present employment, 13 did not tell their employer about their condition. The 2 that did tell had help in finding their jobs through a social worker who explained their condition to the employer. Both of these patients are employed in settings where the employer is familiar with their illness. One is in a hospital and the other in a doctor's home. Here, both patients feel comfortable and accepted even though they have seizures.

In discussing their reasons for not telling their employer that they had, or were susceptible to seizures, 9 patients were of the opinion that they would have been refused the job if they had told. Two patients

TABLE 18

INTERVAL SINCE LAST SEIZURE OF 15 EMPLOYED SEIZURE PATIENTS

Number of Years	Number of Patients	Percent
Total	15	100
0 - 1	5	34
2 - 3	2	13
4 - 5	3	20
6 - 7	2	13
8 - 9		
10 - 11	3	20

believed it was not necessary to tell, but claimed that they would have told if they had been asked. Two others had their onset of seizures after they commenced work with their employers. Interestingly enough both of these patients had seizures on the job. One was reassigned to a less dangerous type of work; the other, who was a cleaner, was told to take time off when he had a seizure or felt one coming on.

When asked the question, "Does your employer know about your seizures now?", 8 replied in the negative and 7 stated that their condition was known. The employers of these latter 7 patients found out when 3 had seizures on the job, 2 told the employer themselves (one told the company doctor, and the other is usually in the habit of telling six or seven months after he has started and has had a chance to prove himself), and,

as already stated, in 2 cases a social worker explained their condition for them. Thus 7 patients were able to keep their jobs even though their employer knew, which indicates some degree of understanding on the part of employers. The latter include an airline, a trucking company office, a private home, a factory, 2 hospitals, and a large manufacturing concern.

Reaction of employees: Because epilepsy is little understood as yet by the general public and "a discriminative attitude ..... is frequently adopted," [1] it would follow that few people with the illness would feel free to discuss it with others. However, 6 patients in this group told their fellow employees themselves about their illness, which indicates a certain degree of comfortableness with it. Three of these patients may have felt at ease about telling since they have had control of their seizures for from 2 to 10 years and their employers knew that they had seizures. On the other hand, the remaining 3 have had very recent seizures and in 2 of these cases their employers do not know. The reaction of their fellow employees to this information was one of understanding, willingness to help if they had trouble on the job and acceptance of the condition as just another illness. The fellow employees of one patient, who did not know that she had seizures, witnessed one of her attacks on the job and were quite afraid of her until she explained the illness to them. There were 8 patients who did not tell their fellow employees that they had seizures.

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[1] Juul-Jensen, "Epilepsy - A Clinical and Social Analysis of 1020 Adult Patients with Epileptic Seizures," p. 99.

Seizure on the job: It would seem that the greatest concern of the employed seizure patient would be fear of a seizure on the job. In this Group of patients, only 2 stated that this possibility worried them. The reason given by these 2 patients for their anxiety was that they felt it would be embarrassing for their fellow employees to witness an attack. In both cases their employers know that they have seizures. In the group of 13 patients who claim they are not worried in respect to seizures on the job, 2 indicated that their medication gives them confidence, 6 never really think about it since they have not had seizures for a number of years, 2 are given time off by their employer when an attack occurs, 2 have nocturnal seizures only, and 1 can feel the seizure coming on and calls in sick to his employer.

Absenteeism: When questioned concerning absence from work, 9 stated they had never been absent, 4 were absent 2 or 3 times a year for a few days each time, and 2 for up to two weeks a year. In the group of 6 who were absent from work during the year, 3 were off for seizures along with other illnesses such as colds and flu, and 3 were off for the latter conditions only. Thus, seizures do not seem to interfere to any great extent with the rate of absenteeism experienced by this Group. Studies [1, 2] compiled on disabled or handicapped workers indicate that they are no more likely to be absent from work than the non-disabled workers.

All the patients indicated that they did not find it difficult to get to work on time.

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[1] Thomas and Davidson, op. cit., p. 46.

[2] Clark, op. cit., p. 160.

Clinic visits: In order to attend the seizure clinic, 3 patients are given time off by their employers and 12 are not. Of the 7 patients whose condition is known to their employers, 3 are given time off for clinic, 2 attend night clinic, 1 calls in sick and attends the day clinic, and 1 who works a night shift attends during the day.

In the case of 8 patients whose employers are unaware of their seizures, 3 attend night clinic, 1 does not attend clinic but has his mother pick up his medication, 2 attend during their days off, 1 during his lunch hour, and 1 requests time off for "something important" and uses this time to attend clinic. Thus, this Group of patients as a whole uses a variety of ways to attend clinic, all of which do not seem to present too much difficulty. Since the hospital provides seizure clinics both during the day and at night, it is not really necessary for the patient to request time off from his employer to attend the clinic.

Previous Employment Experience

In this section, the work undertaken by patients immediately prior to their present job is discussed. According to both Tables 19 and 20, the occupational level of the patients in their previous work situation is almost the same as that of the job they are now in. Two patients with late onset of seizures, who were skilled tradesmen, accepted jobs that pay less than those they held previously and are not working in the trade for which they had been trained. However, this retrogression in occupational level was not referable to seizures. Both of these patients were of the opinion that the work they had been doing as skilled tradesmen was not steady enough due to many lay-offs. It is of interest to note here that,

TABLE 19

DISTRIBUTION OF THE LEVEL OF PRESENT AND PREVIOUS EMPLOYMENT OF 15 EMPLOYED SEIZURE PATIENTS

Level of Employment	Present Employment		Previous Employment	
	Frequency	Percent	Frequency	Percent
Total	15	100	15	100
White collar	4	27	4	27
Skilled	1	7	2	13
Semi-skilled	2	13	3	20
Unskilled	8	53	6	40

TABLE 20

PRESENT AND PREVIOUS EMPLOYMENT OF 15 EMPLOYED SEIZURE PATIENTS

Code Number	Present Employment	Previous Employment
A 098	Advertising manager	Advertising salesman
A 243	Costing clerk	Assistant foreman
A 088	Ward aid	Charwoman
H 041	Manager - shoe store	Manager - shoe store
H 377	Butcher	Labourer (factory)
E 412	Cleaner (hospital)	Fur blocker
H 029	Relay adjustor (factory)	Shipper
A 436	Station attendant	Rubber shoe maker
A 056	Labourer (factory)	Labourer
B 059	Landscaping	Shipper
H 057	Secretary	Stenographer
A 446	Ward aid	Stenographer
A 492	Truck driver	Electrician
A 500	Dispatcher - clerk	Dispatcher (transport)
A 497	Domestic housekeeper	Waitress

contrary to popular belief, in a sample of 969 patients studied by Juul-Jensen [1] in Denmark, only 12 were forced to change their occupations because of seizures.

Table 20 lists the past and present employment of each individual in the sample.

The patients in Group B terminated the job they held prior to their present employment under the following circumstances:

Circumstances	Number of Patients	Reason for Termination
Self-termination	8	3 disliked their jobs
		1 moved to higher level of work and pay
		2 pay was too low
		1 lacked the confidence to continue
		1 did not get along with his supervisor
Employer	6	4 company went bankrupt
		1 was laid off
		1 had a seizure at work
Doctor's advice	1	suffering from a depression and needed a less stressful work situation

As in the case of their present jobs, there was a tendency not to tell the prospective employer about their seizures. Twelve of the 15 patients stated that their previous employer did not know. Only in 1 case where the employer knew did the patient attribute loss of her job to seizures.

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[1] Juul-Jensen, "Epilepsy - A Clinical and Social Analysis of 1020 Patients with Epileptic Seizures," p. 102.

Periods of Unemployment

Ten of the 15 patients in the Group experienced periods of unemployment which ranged from 1 month to as long as 7 years. Among those who had been unemployed, 2 were out of work periodically for 2 or 3 months, 1 was laid off four months of each year, 1 was laid off for one month only, 4 were out of work for 3 months only, 1 was off work for 2 years because of his seizures. One patient did not work for 7 years because an over-possessive mother insisted she stay at home until finally she had to work to support her because her father died.

Of the 10 who experienced periods of unemployment, 7 managed financially with unemployment insurance. The insurance of 4 of these 7 patients was supplemented by savings and assistance from relatives. Two others existed on help from relatives and 1 on savings only.

These 10 patients found new jobs in the following ways: 6 on their own initiative, 1 through friends, 1 through the National Employment Service, 1 through a welfare agency, and 1 was called back to work by his previous employer.

The jobs held by this Group of patients prior to the last 2 jobs were many and varied. They included: salesman, carpenter, traffic manager, camp counsellor, factory labourer, painter, taxi driver, elevator operator, turkey farmer, clerk and charwoman. This listing of jobs, along with Table 7, indicates the versatility of these seizure patients as a group. Large scale studies [1] substantiate that seizure patients are employed in virtually the full range of occupations.

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[1] Goodglass, op. cit., p. 322.

Summary

Even though the majority of patients in Group B are semi-skilled or unskilled, their average earning power is relatively good in comparison to the general population. Thus, for the most part they are secure financially.

Little, if any, difficulty was experienced by this group in locating employment and the majority of them display a stable record of employment.

With the exception of 2 cases, the occupational level of this Group at present has changed little from the level held in their previous work experience.

The majority of the patients have experienced relatively short periods of unemployment and relied on unemployment insurance as a means of financial support. They proved to be quite resourceful in locating other work during these periods.

Most patients express satisfaction with their present work. They display good interpersonal relationships with their fellow employees. However, there is an indication that they do not move out readily to establish friendships at work.

The majority of the patients in this Group did not tell their employers about their seizures on initial applications for present or previous jobs for fear of not being accepted for work.

Seizures do not apparently affect the work situation even though some patients have had very recent daytime seizures. The majority of the patients do not fear having a seizure on the job and the rate of absenteeism due to seizures is minimal.

From the information obtained in this study, early age of onset of seizures does not seem to be directly related with difficulties in or with employment.

This study indicates that there is less employer prejudice toward seizure patients than the researchers originally thought existed. Some patients feel comfortable in telling their fellow employees about their seizures and the reaction on the part of these employees has been positive.

No difficulty is experienced by patients in attending seizure clinic. Although some employers do not apparently allow time for clinic visits, the patients concerned managed, through devious means, to attend clinic when necessary.

In respect to previous work experience, as far as the researchers could ascertain, only 1 patient in this group was released from the job he held prior to his present employment because of seizures.

CHAPTER VI

SOCIAL AND ENVIRONMENTAL HISTORY OF GROUP B

In this Chapter a description is given of the family's influence on the patient's employment experience, the patient's marital relationships, his friendships, community contacts and use of leisure time, his evaluation of his seizures as a handicap, the researcher's impressions of his personality and employability and his clinic contact. For the rationale underlying inclusion of these data areas in the Questionnaire, the reader is referred to the Social and Environmental History of Group A, Chapter IV.

The Family's Influence on the Patient's Employment Experience

As already indicated in Chapter IV, it appeared of significance to examine the association, if any, between a patient's employment experiences and those of his immediate family.

Work record of fathers and siblings: All patients in Group B reported that their fathers had always been steadily employed. Ten of the 15 patients stated that their siblings are steadily employed, 2 have no living siblings, 2 have married sisters only, 1 has a sister who is sporadically employed.

Occupational level: Table 21 compares the level of occupational skill attained by the patient's father with that achieved by the patient

TABLE 21

COMPARISON OF THE LEVEL OF EMPLOYMENT OF THE PATIENTS AND THEIR FATHERS

Level	Patients' Present Occupation	Fathers' Occupation
White collar	4	5
Skilled	1	3
Semi-skilled	3	1
Unskilled	7	6
Total	15	15

himself. From the Table it is apparent that in general the occupational level of the patients is lower than that of the fathers. Eight fathers are in white collar or skilled positions whereas only 5 patients are in this category. Seven fathers are in the semi-skilled or unskilled category with 10 patients in this category. Form and Miller [1] found that there was a strong tendency for the children of white collar fathers to inherit their fathers' occupation or rise above it, while children of manual workers tend to inherit their fathers' occupation or fall below it. The findings of this study tend to disagree with the former part of this statement and to agree with the latter part.

[1] W.H. Form and D.C. Miller "Occupational Career Pattern as a Sociological Instrument" in Man, Work and Society: A Reader in the Sociology of Occupations, ed. Sigmund Nosow and William H. Form (New York: Basic Books Inc., 1962) pp. 295-296.

Since most fathers have had steady employment and since approximately half of them are employed in white collar or skilled positions, it would appear that most patients had a good role model to emulate in respect to employment.

As pointed out earlier in this study, 9 patients have an average of 9.2 years of service with the same employer and the others display good facility in finding steady employment. The Group as a whole presents a very stable employment picture, despite the seizure problem.

Table 22 shows the father's occupation, the patient's present occupation and his early occupational ambition.

Early occupational ambition: According to Table 22 all but three of the patients recalled a specific ambition that they held when younger. In many instances, onset of seizures may have been a factor that influenced occupational choice, since 10 patients had their onset before the age of twenty, as is shown in Table 5. Involvement in the vocation to which 3 of the 12 patients aspired would have been prohibited by the presence of seizures. Mr. L stated that he was doing exceptionally well in hockey and was of the opinion that he would have become a professional had not seizures interfered.

When the 10 patients with early seizure onset were old enough to work, 3 of their families objected to them doing so. Two of these families encouraged the patients to remain in school and one mother wanted the patient to stay at home with her. In 4 families there was no reaction to the patients going to work. Another 2 patients had to work to help their families. In the case of only 1 of these 10 patients did the parents manifest protectiveness because of seizures in relation to the patient's moving into the community to begin work.

TABLE 22

A COMPARISON OF THE FATHER'S OCCUPATION, THE PATIENT'S LAST JOB AND THE PATIENT'S EARLY OCCUPATIONAL AMBITION

Case	Father's Occupation	Patient's Occupation	Early Occupational Ambition
Mr. B	Police detective	Advertising manager	Chartered accountant
Mr. A	Clerk	Costing clerk	None
Mrs. M	Fisherman	Ward aid	Marriage and a home
Mr. L	Labourer	Manager (shoe store)	Professional hockey player
Mr. M	Salesman	Butcher	None
Mr. D	Carpenter	Cleaner	Policeman
Mr. G	Laboratory supervisor	Relay adjustor (factory)	None
Mr. V	Foreman	Station attendant	Doctor
Mr. D	Assistant office manager	Labourer	Radio and electronics
Mr. S	Labourer	Labourer	Mechanic
Miss L	Labourer	Secretary	Social work
Mr. S	Machinist	Ward aid	Stenographer
Mr. G	Tailor	Truck driver	Mechanic
Mr. V	Presser (cleaners)	Dispatcher-clerk	Structural engineer
Mrs. B	Labourer	Waitress	Mother and housewife

Present Relationships with Family of Origin

Of 11 patients with 1 or both parents living, 10 of the latter reside in Montreal. The parents are separated in 1 of the 7 families where both parents are living. The number of patients' siblings who live in Montreal ranges from 0 to 8, the average number per patient being 2.7. Patients' contacts with family members appear to be on a regular basis with 4 making contacts daily, 5 weekly and 5 monthly.

Patients described their relationships with most members of their family as from "fair" to "very good" with none of the patients stating that they did not get along. However, 4 patients indicated that they had certain specific problems with family members. One reported that his aunt is afraid of him because of his seizures, one has a stepmother who has made trouble for her at work in the past by reporting her seizures, ruined her one chance to get married by exaggerating her seizures, and continually says false things about her reputation. Another has a very possessive and protective mother who stifled her life before marriage and even accompanied her and her husband on their honeymoon. The fourth patient has a sister who is continually ordering him about which leads to arguments. The group as a whole has relatively few problems with their families that could be attributed to their having seizures. This indicates a degree of understanding and acceptance within the family group that has possibly been significant in the patients' adjustment to their handicaps.

Parental Overprotection and Age of Onset

Questions 97 and 98 [1] in the Questionnaire were devised in order to ascertain whether overprotectiveness was exercised by parents towards

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[1] See Appendix A.

the patients as children and later as teenagers. Age of onset was taken into account in relation to the response to these questions in order to relate directly overprotection to seizures.

Schlossberg [1] states that,

> Frequently parents of the epileptic child cut themselves off from social contacts. Their anxiety over the physical welfare of the child and the stigma attached to the illness result in even more restricted environment and lack of independence in most of these youngsters.

Table 23 shows that for the most part, parents of the patients in Group B were not restrictive or overprotective when onset of seizures was experienced before age 20. However, the Table does show that 3 of 4 patients whose seizure onset was in the 0 to 10 age range were restricted later as teenagers from going out with girls or boys on dates, staying out late at night, and staying overnight with friends. However, these are circumstances upon which parents generally place certain restrictions.

Thus, as far as the researchers could determine a restrictive or overprotective attitude was not in evidence for these patients when they were children but they were restricted to some extent when they were teenagers. Of course, the limited size of this sample makes it difficult to ascertain the validity of such a finding.

Marriage

In Group B, 10 patients have married, but 3 are separated. The average duration of marriage of the 7 patients who are living together is

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[1] R. Schlossberg, "Employability in Industry", in Institute on Rehabilitation of Seizure Patients, (Montreal: Montreal Council of Social Agencies, 1959), p. 37.

TABLE 23

DEGREE OF PROTECTIVENESS SHOWN BY PARENTS TOWARDS 14[1] PATIENTS IN GROUP B DURING CHILDHOOD AND TEENAGE PERIOD IN RELATION TO AGE OF SEIZURE ONSET

	Activities	Parental Attitude								
		Parents Restricted Patients			Parents Did Not Restrict Patients			Patients Could Not Recall or Had Not Taken Part in Activities		
		Age of Onset in Yrs.			Age of Onset in Yrs.			Age of Onset in Yrs.		
		0-10	11-20	21-60	0-10	11-20	21-60	0-10	11-20	21-60
	Number of Patients	4	6	4	4	6	4	4	6	4
As Children	Riding a bicycle		2		3	3	4	1	1	
	Playing active sports				3	6	4	1		
	Playing with other children				4	6	4			
	Playing away from home	1			3	6	4			
	Belonging to any club or gangs		1	1	4	4	3		1	
	Staying overnight with friends	2	1	2	1	4	1	1	1	1
As Teenagers	Going out with boys/girls on dates	3		1	1	6	3			
	Staying out late at night	3	3	1	1	3	3			
	Staying overnight with friends	3	3	1	1	3	3			
	Playing active sports	1	1		3	4	4		1	
	Getting a job	2			2	6	4			
	Driving a car	1			1	4	2	2	2	2
	Moving away from home	1	1		3	5	4			

[1] No data obtained for 1 patient.

12.6 years, with a range of from 3 to 21 years. Wilson, Stewart and Parker [1] found a high correlation between good marital adjustment and good work adjustment.

There are 5 single patients in the sample. Three have considered marriage but in one case seizures interfered, another is waiting to return to Sicily where he will be married, and the third has not yet found a suitable partner.

Of the 7 married patients, 5 married well after the onset of their seizures and 2 had their onset after they were married. Of the 3 patients who are separated, 2 married after the onset of seizures and 1 before.

Marital problems: The 7 patients who remain married maintain that at present there are no particular problems in their marriage. One patient stated that 3 years ago his mother was continuously telling him what to do and worrying about him as she had always done due to his seizures. His wife resented this and many arguments ensued but the situation has changed and he is now quite happy with his wife. The 3 separated patients indicated that there had been many problems in their marriages. Mrs. M. stated that her husband was not interested in establishing a home and wanted to go out continually. He also made fun of her seizures which she found very difficult to accept. Mr. V. had many arguments with his wife over finances and states that she was a "free spender". However, the major difficulty centred around his wife being too close to her mother. Mrs. B. found out a number of years after her marriage that her husband was a homosexual and left him.

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[1] Wilson, Stewart and Parker, op. cit., p. 313.

Among both married and separated patients, there appears to be a relatively small incidence of problems centering around the fact that they have seizures.

Friendships, Community Contacts and Use of Leisure Time

Friendships and Community Contacts

In Group B, 11 patients indicated that they had particularly good friends in Montreal. Contact with these friends is on a fairly regular basis with 4 associating with them daily, 5 weekly and 2 monthly. When these 11 patients were questioned as to how they had met most of their present friends, they indicated that it was through work, clubs, school, a neighbour, husband and family. All 11 patients stated that most of their friends and acquaintances are steadily employed.

Four patients stated that they had no friends in Montreal. Three of these patients explained that seizures were the main reason for their lack of friends. One of these patients does not like the way people react to seizures and she is afraid of having one while visiting; another has never had any friends outside of the family since his seizures began in early life; another is ashamed to let people know she has seizures. The isolation of these 3 patients appears to be directly related to their seizure condition.

When questioned in respect to their friendships as children and as teenagers, 13 of the 15 patients indicated they had good friendships as children. One of the 2 who had no childhood friends attributed it to seizures. However, both of these patients had friendships as teenagers.

In respect to their teenage friendships, 13 stated they had friends and 2 had none. The latter 2 stated that lack of friends was related to their seizure condition. However, both had good friendships as children before the onset of seizures.

In response to a question concerning membership in community groups, 11 had no affiliation. Four patients belonged to an ethnic group, a church group and/or an epileptic group.

Use of Leisure Time

None of the patients in the sample stated that they were unoccupied during their leisure time. Their hobbies include bridge, music, woodwork, radio repair, building model planes, knitting and photography. Eleven patients stated that they watch television, but that they also participate in other activities such as spending time with friends and family, sports, hobbies and clubs. Their sports activities include golf, bowling and fishing, along with just being a spectator. Nine patients stated that they spend time with friends and family as well as participating in some of the activities already mentioned.

For the most part this sample appears to make good use of leisure time and to have a wide range of interests and activities. Their seizure condition does not appear to greatly affect their participation in leisure-time or social activities, possibly because seizures in most patients are under control at present.

Patients Evaluation of Seizures as a Handicap

As already stated in Chapter IV, the following open-ended question was raised towards the close of the interview: "In your opinion, in what ways have seizures been a handicap to you?" The responses to this question were mainly in relation to the following issues:

(1) Patient's employment: According to the view expressed by each patient, seizures have been a handicap in respect to employment in the following ways:

The Patients' Expressed Views [1]	Number of Patients
Constant fear of having a seizure at work	2
Lost a number of jobs due to seizures	2
Employers do not hire someone with seizures	4
Restricted from factory work	1
Would have found better jobs and better salary	1
Work affected by seizures before medication	1
Constant fear that employer will find out	1
Unprepared for work role because his mother was overprotective with his seizures	1
Found it difficult to find work	1

[1] Some patients indicated more than one of the views listed.

(2) Patients' self image: One patient was previously ashamed of her epilepsy, and 1 has felt inferior because of seizures for the better part of her life, but since her recent marriage her husband has helped her to overcome this feeling. Another patient was continually depressed before medication as he never knew when a seizure would occur.

(3) Patients' social relationships: Many of the patients indicated that seizures have been very handicapping in this area. Two stated they could not move out to establish contact with others, 1 thinks his relationships with others would be better if he did not have seizures, 2 worry that they will have a seizure when they are out in public, 1 said that seizures interfered with teenage friendships and activities, 1 sees the reaction of others toward seizures as being very negative, 1 states he has an absence of friendships due to seizures, 2 are continually afraid that someone will become aware of their seizures.

(4) Restriction of patients' activities: Three patients stated that seizures restrict social drinking, parties and staying out late at night. Another 2 had to stop playing active sports, and 1 patient is always concerned that he will injure himself when he is having a seizure.

(5) Seizures not a handicap: Three patients indicated that seizures were really not a handicap. They stated that by facing up to having seizures and adjusting to it one can lead a normal life. Five patients feel more secure at present and state that seizures are less handicapping than previously, because of medication. The fact that they have not had seizures for a number of years, or that the seizures have been reduced to very minor ones, gives them a feeling of normalcy which they did not experience previously.

(6) Other responses: Mr. B felt very strongly that seizures had affected his schooling. He had always come first in his class, won awards, and participated in all activities. When he had seizures during adolescence, the shock left him with no desire to accomplish anything. At that time, he looked upon himself as abnormal and could no longer compete. He stated that seizures "have cost me 20 years of my life until medication gave me complete control and I was then able to forge ahead." Mr. B now holds a very successful, high-salaried, white collar position.

Summary: The patients in Group B are aware that they are handicapped by seizures in their life situation, their perceptions about this handicap are realistic and they are not denying the handicapping aspects of the situation.

Interviewer's Impressions of Personality and Employability of Patients

As already indicated in Chapter IV, on the basis of impressions obtained during one interview the patients' personality characteristics and employability were assessed.

All patients in Group B presented an adequate picture in respect to general appearance and their cooperation during the interview. There may have been some inaccuracy in the responses of 2 patients due to the fact that an interpreter was used. However, the other patients in the Group seemed to make a special effort to be accurate. The intellectual level of 2 patients appeared to be somewhat below average, but the remaining patients appear of average or above average intelligence. The personality of each

patient was difficult to assess in only 1 interview, but even on the basis of this limited contact, it was evident that 2 patients had some personality difficulties. Both of these patients evidenced depressive symptoms. Information from the Schedule of the 1962 MNI Study showed that only 2 patients in Group B (the 2 referred to above) had had psychiatric assessment.

From the standpoint of general appearance, intelligence, willigness to cooperate, attitude and personality characteristics, the patients in this group would appear to be eligible for full-time employment. This observation is substantiated by the fact that these patients have been continuously employed for at least 3 years.

Clinic Contact

Treatment at MNI Clinic

Patients in Group B have been attending the seizure clinic at MNI for a period ranging from 4 to 29 years with an average of 12 years. The circumstances leading to treatment at the MNI were:

Circumstances	Number of Patients	Referred to MNI by:
Total	15	
Emergency (major seizures)	3	
Sent from other hospitals	3	Hospital doctor
Came for check-up or tests	9	Family doctor - 2 Family - 3 A friend, neighbour, or social worker - 4

Present Clinic Contact

Thirteen patients attend clinic from once every 3 months to once every 6 months. The average contact is once every 5 months. Two patients do not attend clinic at present; 1 sends his mother to pick up his medication; and the other does not see the necessity of coming since he has had no seizures in 6 years.

All those who attend clinic stated that they do so either to pick up medication or to have a check-up. The doctors have prescribed medication for all patients in the sample. There are 13 who take medication regularly and 2 who believe there is no need for it, since they have not had seizures for a number of years. The expense of medication creates no particular difficulty, except for 1 patient. The latter has received a reduction through the Social Service Department. Meeting medication expenses is apparently eased by the income level of the patients in this sample. Apparently their work does not interfere in any way with the taking of medication.

MNI Social Service Contact

When the patients were asked if they had ever been in direct contact with a social worker at the clinic, 7 replied that they had. Six of the 7 who had been interviewed by a social worker were referred by the admissions office, a doctor, other social workers, and/or a friend. The reasons for referral were: administrative purposes, glasses, medication expenses, reassurance and counselling. All of these patients considered their contacts with the social worker as worthwhile in some respect.

TABLE 24

ATTITUDE OF 14[1] PATIENTS TOWARDS THE SEIZURE CLINIC, DOCTORS, AND MEDICATION

Attitude	Patients Response		
	Agree	Disagree	Undecided
The medicine prescribed keeps me from having seizures	12	1	1
The doctor's advice has not helped me	1	12	1
I feel better after seeing the doctor	9	5	
The doctors haven't really helped me	1	13	
Coming to clinic has not helped me	4	11	
It is too much trouble to come to clinic regularly	2	13	
Attending clinic takes too much time	7	7	
Talking with other patients is helpful	5	8	1

Attitude Towards the Clinic, Doctors, and Medication

Table 24 indicates the patients' attitudes[2] toward the clinic, the doctors and medication. Most patients are of the opinion that their seizures are controlled by medication, and that the doctors have been a help to them

[1] No data obtained for 1 patient.

[2] See Appendix A, question 87.

either through advice or reassurance. Several patients commented that the doctor did not allow sufficient time to discuss the many aspects of their seizure problem and that sometimes "one feels as if he is on an assembly line where production comes first."

The patients generally are quite positively orientated toward the clinic except that as shown in Table 24, for some clinic attendance is too time-consuming.

Summary

The occupational skill achieved by the patients, for the most part, is lower than that of their fathers. Fathers and siblings seem to have represented good role models for the patients. Twelve (80 per cent.) of thepatients in Group B had specific occupational aspirations when they were younger. When patients with an early age of seizure onset began to work, there was relatively little objection from their families that could be attributed to seizures.

All but 1 patient have parents or siblings living in Montreal, and regular contact is maintained with them. Patients' relationships with their family of origin are generally good. Two patients have problems with family members that are specifically related to their seizure condition.

A certain amount of restriction or overprotection was shown by parents during the adolescence of patients with an early age of seizure onset.

Of the married patients in Group B, 3 (30 per cent.) are separated. Among the many problems manifested in these unsuccessful marriages, only in 1 case was there some difficulty related to seizures. The 7 patients who

remain married have stable marital relationships.

Approximately three-fourths of the Group have regular contacts with particularly good friends in Montreal who are steadily employed. The patients with no friends, for the most part, attribute this to seizures. Most of the patients had good friendships as children and teenagers.

Three-fourths of the patients have no community affiliations. All patients seem to make good use of leisure time and have a wide range of interests.

Patients indicated that seizures have been most handicapping in the areas of employment, social relationships and general activities. Approximately half of the Group indicate that seizures are not a handicap or that they are less handicapping than previously.

Most patients attend seizure clinic regularly and have done so for a number of years. They take their medication regularly and have no particular difficulty in paying for it.

At some time or other, approximately half of the patients have been in contact with one of the clinic social workers but only a few of these patients attended for counselling. Relatively few patients manifest personality difficulties that could affect their employment situation. From the standpoint of general appearance, intelligence, attitude and personality characteristics, the patients in this group would appear to be eligible for full-time employment.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The major question upon which this study is based is, "What circumstances contribute to the employment/unemployment of a selected group of seizure patients?" In this Chapter, the research findings will be summarized and related to this question.

Summary

Age and Sex

No difference exists between Groups A and B in respect to mean age and sex distribution.

Education

The educational level of both Groups is virtually identical (grades 7.5 and 8). More patients in Group B undertook special or vocational training than in Group A. In addition to exhibiting a more stable employment record than Group A, Group B appeared more alert to the necessity for improvement in their educational and occupational levels.

Employment

(1) No difference exists between the Groups in level of occupational skill. The present occupational level of patients in both Groups has not changed significantly from that of previous positions, with 3 exceptions. Only one of the latter was referable to seizures.

(2) Group B patients have been in their present jobs, on the average, 5.8 years (range 3 months to 18 years). Group A patients held their last jobs, on the average, 3.5 years (range - 5 weeks to 10 years).

According to their employment histories, patients in Group B have been unemployed less frequently and for briefer periods than Group A patients. In most cases, unemployment periods in Group B were only a matter of months, in contrast to the 5-year average for Group A. During unemployment periods, Group B and Group A (Employed) maintained themselves, for the most part, on unemployment insurance. Group A (Unemployed) patients have been unemployed for such long periods that they became ineligible for unemployment insurance and were granted disability pensions.

(3) Both Groups manifested positive attitudes towards their jobs and seemingly derived satisfaction from their present or previous employment. Although patients in both Groups are reasonably satisfied with previous or present jobs, 9 Group B patients expressed a preference for other work, compared to 3 in Group A (χ^2 = $p > .30$). Both Groups appeared to have satisfactory relationships with fellow employees.

(4) Seizures were a factor in the release of only 3 of the 25 patients from their last jobs. Termination of the last jobs held by 5 Group A patients and 2 in Group B would appear to be related to patients' personality characteristics. Seven of 15 Group B patients, compared with 1 of 10 Group A patients, left their last jobs to improve their occupational status. However, this difference is not statistically significant. (χ^2 = $p > .20$).

(5) Similar techniques were employed by both Groups to locate employment. Group A experienced significantly more difficulty in location of employment than Group B. Only presently unemployed patients cited seizures as contributing to difficulty in the location of employment.

Seizures

(1) No significant difference was found between the two Groups in respect to age of seizure onset and duration of this condition.

In Group B, 10 patients have been seizure-free from 1.5 to 10 years, with an average of 6 years. In Group A, 5 patients have been free of seizures for 1.5 to 4 years, the average being 2 years.

(2) All patients in Group A and all but 2 in Group B have made it a practice not to inform employers on initial application concerning their seizures, for fear of not being hired. Unfortunately, no information was obtained as to whether this practice had developed from bitter experience or from the patients' own fears of rejection.

Seven Group B employers became aware of patients' seizures subsequent to their employment, but took no action in respect to this information. Two of 4 Group A employers who learned of patients' seizures later released them from their jobs, for reasons which were not clear to the latter. More patients in Group A than in Group B admit concern lest they have seizures at work. Six Group B patients and none in Group A confided in fellow employees in respect to their seizures. That a good peer relationship exists is suggested by the fact that 3 of the 6 patients discussed their seizures with fellow employees, although their employers were unaware of their condition.

(3) All but one patient in Group A and 3 in Group B were of the opinion that seizures have constituted a handicap. More areas of handicap were identified by Group B. Patients cited employment, social relationships and general activities as areas in which they had been most handicapped. Of great significance is the fact that 21 of the 25 patients who participated in this study indicated that they had been handicapped in some way in respect to employment.

Social and Environmental History

(1) The occupational level of fathers of both Groups is similar and tends to be slightly higher than that of the patients. Fathers and siblings of patients in both Groups seem to have provided adequate role models in the area of employment.

More patients in Group B than in Group A recalled early occupational ambitions. Group B patients tended also to have higher occupational ambitions than Group A patients. Parents of patients in both Groups raised little objection to patients' undertaking full-time employment. There was little, if any, over-protection manifested by parents in respect to patients' early activities.

(2) Most patients in both Groups have some members of their family of origin living in Montreal and maintain regular contact with them. More patients in Group A (4 of 10) than in Group B (4 of 15) report difficulties with specific family members.

(3) Eighteen of the 25 patients who participated in the study married. Seven marriages failed. More patients in Group A (8 of 10) than in Group B (10 of 15) married, but more Group A marriages (4) failed. Of the 7 separated patients in the total sample, 3 remain unemployed. Failure of 2 of the 18 marriages in the total sample was attributed partially to seizures.

In Group B, 7 patients have remained married from 3 to 21 years, with an average of 12.6 years. In Group A, 4 patients have remained married from 9 to 29 years, with an average of 20 years.

(4) Five of 9 patients in Group A and 4 of 15 in Group B have no friends. Three of these latter Group B patients attribute this to seizures. Remaining patients in both Groups have contact with friends on a regular basis. Four patients in each Group belong to organized groups in the community.

The range of interests and activities of patients in both Groups is similar, although unemployed patients report some difficulty in occupying their time.

(5) A significantly higher proportion of patients in Group A have manifest personality difficulties. Eight of 10 Group A patients had been referred for psychiatric assessment, compared with 2 of 15 patients in Group B. The difference between these two Groups is statistically significant (χ^2 = p>.01). There is a high incidence (3 of 10) of problems with alcohol in Group A, while no patients in Group B exhibit this tendency (χ^2 = p<.10).

Clinic Contact

No difference exists between the two Groups in respect to duration of Clinic contact and present frequency of attendance. Both Groups seem, for the most part, positively orientated toward the Clinic and its personnel.

Most patients in both Groups take prescribed medication regularly. Payment for medication presents a problem only for the majority of patients in Group A.

More patients in Group A than in Group B (χ^2 = p>.10) have had contacts with the MNI Social Service Department. More of Group A's contacts involved personal counselling.

Conclusions

A number of factors that the researchers had expected might differentiate between Groups A and B, such as education, level of occupational skill, attitudes toward employment, etc., did not do so in the present

study. This finding is in agreement with larger scale studies of Juul-Jensen [1] in Denmark and Gordon and Russell [2] in Great Britain, which also found that levels of occupational skill and education had no bearing on patients' employment adjustment.

It has been fairly well documented in the literature that seizures alone are never the sole cause of unemployability. This was also found to be true in the present sample. From the data obtained, it appears that age of onset and duration of the illness have no relevance for the patients' present employment status. Further, the fact that several patients in Group B have had recent daytime seizures and remain employed substantiates the impression that reasonably infrequent seizures need not interfere with employment.

From the research data, it would appear that the major contributing factors to the unemployment/employment of patients in this sample are personality characteristics, interacting with certain aspects of each patient's life experience and present environment. The researchers' impression that personality attributes of the unemployed patients are maladaptive for employment is somewhat substantiated by the statistical significance of the finding that a far greater proportion of Group A patients had been referred at some time for psychiatric assessment. This can be taken as an indication that these patients manifested personality aberrations or emotional states that in the opinion of Clinic personnel warranted psychiatric evaluation.

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[1] Juul-Jensen, "A Clinical and Social Analysis of 1020 Adult Patients with Epileptic Seizures."

[2] Gordon and Russell, op. cit.

The specific personality attributes that contributed to unemployment/employment were not identified in the present study. In this connection, however, it is of interest to note that another study,[1] using a battery of personality tests aimed at the characteristics deemed most relevant for employment adjustment, found this tool unsuccessful in distinguishing between patients with well-controlled seizures who were unemployed, and employed patients with more severe seizure conditions who overcame considerable disability to continue working. The authors concluded that the few unemployed epileptics in their sample with reasonably well controlled seizures and normal intelligence tended to be individuals of passive orientation who had, in addition, sheltering family situations which did not require them to make a more adequate adjustment.[2] Unemployed patients in the present study would appear to be illustrative of this latter finding.

Although differences between the two Groups of patients in the areas of marriage, friendships, and use of alcohol were not statistically significant, there are indications that Group A patients are not functioning as adequately as those in Group B in these areas.

Interesting information was obtained in the present study in respect to the implications of seizures for employment. That there is less employer prejudice than had been anticipated is suggested by the fact that seizures had played a part in the release of only 3 of the 25 patients from their previous jobs. In these 3 cases (12.4 per cent. of the sample), circumstances

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[1] Goodglass, et al., op. cit.

[2] Ibid.

surrounding termination were such that employers' action did not seem totally unjustified. In Juul-Jensen's study of over 1000 epileptic patients,[1] similarly, only 8.4 per cent. had been released from jobs at some time because of seizures.

For the most part, patients in both Groups make it a practice not to inform employers concerning their seizures. It is of interest to note that Pond and Burden [2] in a study conducted in Great Britain also found that most seizure patients do not register themselves as disabled. This practice is worthy of note in view of the more favourable climate in that country in respect to the employment of disabled persons as a result of the provisions of the Disabled Persons Act, requiring industry to hire a certain percentage of physically or mentally disabled. These findings raise a question as to the significance, over and above economic considerations, declaring oneself "different" or disabled may have for the individual. The fact that patients fear rejection if employers are made aware of their seizures could be seen as a deterrent to initiative. In addition, the more experiences a patient has of being refused employment, even if for reasons other than his seizures, the less confidence in himself he is likely to retain.

The possibility of experiencing a seizure at work is of more concern to patients in Group A than in Group B. In view of the number of years most Group B patients have been both free of seizures and steadily employed, it is possible that their fear of having a seizure at work and the attendant

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[1] Juul-Jensen, "A Clinical and Social Analysis of 1020 Adult Patients with Epileptic Seizures," p. 119.

[2] Pond and Burden, op. cit., p. 82.

anxiety aroused by this eventuality has become, to some extent, repressed. The resultant security undoubtedly contributes, in turn, to continuation of employment.

Although most patients in the sample indicated that their seizures have handicapped them in some way in respect to employment, the fact remains that Group B patients have been better able to adapt themselves in this area to the restrictions imposed upon them by their seizures. In addition, Group B patients appear to have more realistic perceptions of the handicapping aspects of their seizures and exhibit no apparent need to deny their handicap.

Findings in the present study also offer some indication that the problem of unemployment among moderately well-controlled seizure patients of normal mentality is not anywhere near as great as is envisaged by many lay and professional persons. Unemployed patients included in this study were selected from the unemployed of the larger Clinic population of 500 identified in the MNI 1962 study. Aside from the few patients who were selected but not available for study, Group A represents the total number of English-speaking, unemployed Clinic patients who met the criteria for participation in this study and whose medical records did not suggest the presence of gross personality or other disturbances. In the final analysis, Group A includes only 4 patients who are both presently unemployed and willing to undertake employment. These 4 patients also manifest personality difficulties which appear to make adaptation to gainful employment difficult or impossible.

It is difficult to assess objectively the interplay of factors contributing to the personality difficulties of the unemployed patients in this study. Loss of self confidence and jeopardization of role-functioning associated with extended unemployment may feed into, or accentuate already

existing personality problems, or in some cases, may in themselves be responsible for the development of personality problems. In any event, since the unemployed patients in this study do manifest more personality difficulties than the employed, perhaps greater attention should be focussed on early unemployment experiences. In respect to the latter, it would seem that patients could be encouraged to report unemployment immediately to Clinic personnel so that skilled help with this problem and its attendant psychological implications could be given before the situation becomes chronic. Vocational guidance early in the history of the condition would seem indicated also, especially when seizure onset occurs before the usual age of employment.

Critique

Research Design: Originally it was planned to compare in detail the employment and social experiences of a group of unemployed patients with that of a group of employed patients. As already stated, due to circumstances beyond the researchers' control, Group A was subdivided into a group of unemployed and employed patients. As a result of this, meaningful comparison of Group A with Group B proved to be extremely difficult. In addition, the limited size of the available samples restricted inference from the data obtained.

In the original conception of the study the researchers aimed to eliminate the necessity for a clinical evaluation of the medical aspects of the patients' illness, by focussing the investigation primarily on recent employment experiences of presently well-controlled seizure patients. An obvious limitation in this study is the lack of information related to the patients' past seizure history. The severity or mildness of the individual patient's seizures in the past might be expected to have had a great influence

on the patient's present adaptation.

Due to time limitations, it was not possible to make full use of the complete employment histories of Group A patients.

Questionnaire: In the researchers' efforts to avoid leading questions and suggestions of answers, some questions in the Questionnaire, for example numbers 97 and 98 [1], were needlessly indirect. More pertinent information could perhaps have been obtained through more direct questioning. By the same token, several questions, for example numbers 60 (a), 35 (a) and 91 (a), [2] almost invited a bland response and the patient might have been led to discuss the area under consideration in more detail if he had not been given the alternative of a one word answer. An effort was made to include the same question areas in both the Unemployment section of the Questionnaire and the section administered to the Employed Group. However, there were a few discrepancies in the questions asked and the information obtained which did not simplify final comparison of the two groups along certain dimensions. Because it was anticipated that patients might be sensitive to questioning in respect to some areas of personal background and the handicapping aspects of seizures, detailed exploration was not undertaken in these areas. On the basis of patients' responses to the questions raised in these areas, it would appear that more detailed investigation could have been attempted.

Once good rapport was established in the interview, pertinent information was readily obtained. When an opportunity was made at the end of the

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[1] See Appendix A.

[2] See Appendix A.

interview for patients to express their reaction to the Questionnaire, all indicated that they had not been adverse to discussing their experiences and had not thought any of the questions too personal.

Suggestions for Further Research

On the basis of the researchers' experience during this study, it would appear that the following topics warrant further investigation: employers' experiences with epileptic employees; family attitudes towards a family member who has seizures; the developmental history of a large group of seizure patients. It is suggested that a sample for a study in the last-mentioned area be confined to patients under age 30 in order that accuracy of family informants' recall might be better insured. Another study might explore the personality characteristics and employment experiences of a population of permanently employed seizure patients, without regard to the type of seizures or degree of control attained, in the hope of gaining some insight into the personality attributes characteristic of this group who have adapted successfully to employment in spite of varying handicaps. Although at this point no design is proposed for the study of any of the fore-mentioned problems, it is suggested, in view of the many large scale surveys recently published that there is a need for studies which will investigate in greater depth the problems of seizure patients.

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Dear

You will probably remember answering a few questions which were asked last year of all seizure patients who attended the Neurology and Neurosurgery Clinics. We greatly appreciated your assistance and hope that you will be willing to help us again this year.

We have selected a small group of patients to help us by answering questions which will give us further information, particularly about employment. We are asking your help in the hope that better services can be provided in the future for you and other seizure patients.

Kindly indicate on the enclosed slip whether you will be willing to take part in this study and return the slip to us at your earliest convenience. When we hear from you, we will be in touch with you to arrange a definite appointment.

Sincerely yours,

Introduction to Questionnaire

You are probably wondering how you can be of help to us in our study ..... We are gathering information to help us understand more fully the difficulties that are sometimes experienced by people with seizures - so that the hospital, in the future, may be able to provide better services. We would like to ask you a number of questions about your family and about some of the jobs that you have had. Any information that you give us will be kept strictly confidential and will be used only for the purpose of our study.

I know it is difficult to remember exact dates and other facts, so just give me your best guess if you are not sure about any of the things I ask you.

QUESTIONNAIRE

Code No. _____

O.P.D. No. _____

Date _____

I. Identifying Information.

1. (a) How old are you? _____

   (b) What is the date of your birth? _____ month / _____ day / _____ year /

2. (a) Where were you born? _____

   (b) What nationality are your parents? _____

   (c) When did you come to Canada? _____

3. (a) What is your primary language? _____

   (b) What other languages do you speak? _____, _____, _____

4. Are you married? Yes ____ No ____ S: ____, Sep: ____, Div: ____, Wd: ____

5. Sex: M ____ F ____.

6. (a) Have you any children? Yes ____ No ____

   (b) How many? _____

   (c) What are their ages? ____, ____, ____, ____, ____, ____, ____, ____

7. (a) How many children were there in your family? _____

   (b) Where did you come in the family? _____

8. With whom are you living at present? _____

II. EDUCATION

9. (a) How far did you go in school? _____

(b) Total number of years of school attendance: _____ (#30)

(c) Grade completed: _____ (#31)

(d) Specialized education _____ (#33)

10. Why did you leave school?

11. (a) In your opinion, was your schooling affected in any way by your seizures? Yes ___ No ___

(b) In what way?

12. (a) During the past year have you attended any classes or undertaken any type of training? Yes ___ No ___

(b) If yes, specify:

III. (A) EMPLOYMENT HISTORY

13. Are you working at present? Yes ____ No ____

14. What do you do? (Present occupation) _____

15. Where do you work? _____

16. What are your working hours? _____

17. How long have you been working there? _____

18. About how much do you earn per month? _____

19. (a) Is your wife/husband working? Yes ____ No ____

(b) About how much does he/she earn per month? _____

20. (a) How did you find your present job?

Self: ____ Relatives: ____ Friends: ____ Employment Bureau: ____

Other: ____

(b) Tell me just how you went about it.

21. (a) Did you experience any difficulty in getting your present job? Yes ____ No ____

(b) Describe some of the difficulties that you experienced.

(c) What was the cause of these difficulties?

Lack of experience: ____ Lack of skill: ____
Lack of education: ____ Language barrier: ____
Other: _____

(d) To how many places did you apply before getting your present job? _____

22. Were you having seizures at the time? Yes ____ No ____ DK ____

23. (If yes) About how frequent were they? _____

24. (a) Did you think the difficulty in getting your present job was due in any way to your seizures? Yes ____ No ____ DK ____

(b) (If yes) In what way? _____

25. Do you ever feel worried that you may have a seizure on the job? Yes ____ No ____ DK ____

26. (a) When applying for your present job, did you tell your employer about your seizures? Yes ____ No ____

(b) What reasons did you have for doing/not doing this?

_____

(c) How did he react to this information? _____

27. Does your present employer know about your seizures now?
Yes ____ No ____ DK ____

28. (If yes) How did he find out?
Self: ____ Seizure at work: ____ Other employees: ____
Other: _____

29. (a) Do your fellow employees know about your seizures?
Yes ____ No ____ DK ____

(b) How did this become known to them? _____

(c) What was their reaction to this information? _____

30. (a) About how often are you absent from work? _____

(b) For what reasons? _____

31. (a) Do you find it difficult to get to work on time? Yes ____ No ____

(b) (If yes) Why? _____

32. (a) Does your employer give you time off to attend the clinic?
Yes ____ No ____

(b) (If no) What other arrangements do you make? _____

33. When did you last have a seizure? _____

34. (a) Do you like the type of work you are doing? Yes ____ No ____

(b) What are some of the things you like/dislike about it?

_____

(c) Are there some things you like/dislike about it? _____

(d) Is there any other type of work you would prefer to be doing?

_____

(e) Can you think of any reasons why you have not undertaken such work? _____

35. (a) How do you get along with the other workers? _____

(b) Do you have any particular problems with them? _____

36. Do you have any particular friends at work?
Yes ____ No ____

37. What job did you have before your present one? _____

_____

38. (a) How did it come about that you left your last job?
Self termination ____ Employer ____ Doctor's advice: ____
Other: _____

(b) What was the reason for termination? _____

(c) Do you have any ideas about this other than those you've mentioned? _____

(d) Did this employer know about your seizures? Yes ____ No ____ DK ____

(e) Do you think the loss of your job was due in any way to your employer's knowing this? Yes ____ No ____ DK ____

(f) (If yes) Why do you think so? _____

39. (a) Have you ever been out of work? Yes ____ No ____

(b) (If yes) When (date): _____

_____

_____

(c) For how long? _____

_____

_____

40. (If yes) How did you manage financially during this/these periods? Unemployment insurance: ____ Savings: ____ Spouse: ____ Relatives: ____ Welfare: ____ Other: _____

41. When you were out of work, how did you go about getting another job? Own efforts: ____ Relatives: ____ Friends: ____ Welfare agency service: ____ National Employment: ____ Other: _____

42. In addition to your present job and the one before it, what other jobs have you held? _____

III. (B) UNEMPLOYMENT HISTORY

43. (a) Are you working now? Yes ____ No ____

(b) Have you ever worked? Yes ____ No ____

44. How long have you been unemployed? _____

45. (a) Where were you working in the last job you held? _____

(b) What did you do in your last job? _____

(c) How long were you there? _____

46. What were your working hours there? _____

47. (a) How did it come about that you left your last job?
Self termination: ____ Employer: ____ Doctor's advice: ____
Other: _____

(b) What was the reason for termination? _____

(c) Do you have any ideas about this other than those you've mentioned? _____

48. (a) Were there any particular problems for you in working at your last job? _____

(b) Can you tell me a little about some of these problems?

_____

(c) About how often were you absent from work? _____

(d) Why was that? _____

(e) Did you find it difficult to get to work on time?
Yes ____ No ____

(f) Why was that? _____

(g) Were there any problems at home that interferred with your working? _____

49. Were you having seizures when you were working at your last job?
Yes ____ No ____

50. How often did they occur? _____

51. Were you ever worried that you might have a seizure on the job?
Yes ____ No ____

52. In your opinion, were your seizures in any way responsible for the termination of your last job? Yes ____ No ____ DK ____

53. (a) When applying for the last job you had, did you tell your employer that you had seizures? Yes ____ No ____

(b) What reasons did you have for doing/not doing this?

_____

(c) How did he react to this information? _____

54. Did this employer find out about your seizures during the time that you were working for him? Yes ____ No ____ DK ____

55. (If yes) How did this become known to him?
Seizure at work: ____ Other employees: ____ Self: ____
Other: _____

56. (a) Did your fellow employees know about your seizures?
Yes ____ No ____ DK ____

(b) (If yes) How did this become known to them? _____

(c) How did they react to this information? _____

57. (a) Did your employer give you time off to attend the clinic?
Yes ____ No ____

(b) (If no) What arrangements did you make about this? _____

58. When did you last have a seizure? _____

59. (a) Did you like the type of work you were doing? Yes ____ No ____

(b) What were some of the things you liked/disliked about it? _____

(c) Were there some things you liked/disliked about it? _____

(d) Was there any other type of work you would have preferred to have done? _____

60. (a) While you were working at your last job, how did you get on with the other workers? _____

(b) Did you have any particular friends at work?
Yes ____ No ____

(c) Did you have any particular problems with any of the other workers? _____

61. What did you do in the period right after you left your last job?

_____

62. When you left your last job were you interested in finding other work? _____

63. (a) Have you experienced difficulty in finding other work?
Yes ____ No ____

(b) What were some of the difficulties you experienced? _____

64. How have you gone about looking for work? _____

65. To how many different places have you applied? _____

66. (a) Have you sought the help of any person or agency to help you find work? Yes ____ No ____

(b) Specify: _____

(c) (If yes) With what results? _____

(d) (If no) Why not? _____

67. (a) Have you ever thought of training for another kind of job?
Yes ____ No ____

(b) (If yes) Specify: _____

(c) Why haven't you undertaken such training? _____

68. (a) Did you ever think of moving to another city to find employment?
Yes ____ No ____

(b) (If no) Why not? _____

69. (a) Have you been looking for work during the past month?
Yes ____ No ____

(b) (If no) When was the last time you looked for work? _____

70. What do you see as some of the obstacles in the way of your finding employment? _____

71. Now, I wonder if you can tell me about the jobs you've had before your last job. (see chart for questions.)

72. About how many jobs have you had since you began to work? _____

73. How are you managing financially since you have been out of work?
Unemployment insurance: ____ Savings: ____ Relatives: ____
Welfare: ____ Spouse: ____ Other: _____

74. About how much have you to go on each month? _____

75. (a) Is your wife/husband working? Yes ____ No ____

(b) Did your spouse work before you became unemployed? Yes ____ No ___

76. (a) Has anyone or any agency in the community given you any kind of help since you have been out of work? Yes ____ No ____

(b) (If yes) What kind of help? _____

(c) How did your circumstances become known to them? _____

CHART FOR ITEM 71

Name of Firm	Position	How Obtained	Dates of Employment
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

Reason for Termination	Seizures Known to Employer?	Length of Unemp. Following Termination
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

IV. CLINIC CONTACT

77. Age at onset of seizures: _____ (#16)

78. (a) When did you first come to the clinic? _____

(b) What circumstances brought you here? _____

79. (a) Did someone recommend that you come to the clinic? Yes ___ No ___

(b) (If yes) Who recommended it? _____

80. (a) About how often do you come to clinic? _____

(b) When you do come, what usually brings you here? _____

81. Have the doctors precribed any medication for your seizures?
Yes ___ No ___

82. (a) Are you able to take your medication regularly? Yes ___ No ___

(b) (If no) Why not? _____

83. Does/did your work interfere in any way with your taking your medicine? Yes ___ No ___

84. (a) Are you able to meet the expense of your medication?
Yes ___ No ___

(b) (If no) What arrangements do you make? _____

85. (a) Have you ever talked with a social worker at the clinic?
Yes ___ No ___

(b) Did someone suggest that you do this? Yes ____ No ____

(c) (If yes) Who? _____

(d) For what reason? _____

85. (a) Was this contact with the social worker worthwhile? Yes ____ No____

(b) (If no) Why not? _____

87. Here are some of the things other patients have said about their coming to clinic. Will you please tell me whether you agree or disagree with each statement I read to you from this list:

(a) The medicine prescribed at clinic keeps me from having seizures. Agree: ____ Disagree: ____

(b) The doctor's advice has not helped me. A: ____ D: ____

(c) Coming to clinic has not helped me. A: ____ D: ____

(d) I feel better after seeing the doctor. A: ____ D: ____

(e) The doctors haven't really helped me. A: ____ D: ____

(f) Its too much trouble to come to clinic regularly. A: ____ D: ____

(g) Attending clinic takes too much time. A: ____ D: ____

(h) Talking with other patients is helpful. A: ____ D: ____

V. SOCIAL AND ENVIRONMENTAL HISTORY

88. (a) Are your parents living? Yes ____ No ____

(b) Are they living together? Yes ____ No ____

(c) Do they live in greater Montreal? Yes ____ No ____

89. How many brothers and sisters do you have in greater Montreal?
Brothers: ____ Sisters: ____ Total: ____

90. How often are you in touch with members of your family?
Daily: ____ Weekly: ____ Monthly: ____

91: (a) How do you get along with most of the members of your family?
_____

(b) Are there any particular problems? _____

92. (a) What kind of work does/did your father do? _____
_____

(b) Is/was he steadily employed? Yes ____ No ____ DK ____

(c) Have your brothers and sisters been steadily employed?
Yes ____ No ____ DK ____

93. (a) How long have you been married? _____

(b) (If single) Have you ever considered getting married?
Yes ____ No ____

(c) (If yes) What was it that interferred with your plans? _____

94. (a) How do/did you get along in your marriage? _____

(b) Are/were there any particular problems? _____

95. When you were growing up, what did you think you would like to do?

_____

96. When you became old enough to work, what did your family think about your working? _____

97. Often mothers will restrict their children from doing certain things. When you were a child, did your mother try to keep you from:
(a) Riding a bicycle. Yes ____ No ____ DK ____

(b) Playing active sports. Yes ____ No ____ DK ____

(c) Playing with other children. Yes ____ No ____ DK ____

(d) Playing away from home. Yes ____ No ____ DK ____

(e) Belonging to any clubs or gangs. Yes ____ No ____ DK ____

(f) Staying overnight with friends. Yes ____ No ____ DK ____

98. When you were a teenager, did your mother keep you from:
(a) Going out with boys/girls on dates? Yes ____ No ____ DK ____

(b) Staying out late at night? Yes ____ No ____ DK ____

(c) Staying overnight with friends? Yes ____ No ____ DK ____

(d) Playing active sports? Yes ____ No ____ DK ____

(e) Getting a job? Yes ____ No ____ DK ____

(f) Driving a car? Yes ____ No ____ DK ____

(g) Moving away from home? Yes ____ No ____ DK ____

99. What do you do in your spare time?
Hobbies: (specify): _____ Television: ____
With friends: _____ With family: _____ Sports activities: ____
Church: _____ Clubs or interest groups (specify): _____
Other: _____

100. (a) Have you any particularly good friends here in Montreal?
Yes ____ No ____

(b) (If yes) About how often are you in touch with them?
Daily: _____ Weekly: _____ Monthly: _____

(c) As a teenager, did you have any particularly good friends?
Yes ____ No ____

(d) As a younger child do you remember having any particularly close friends? Yes ____ No ____

101. Have you met your present friends:
Through other friends: _____ Through work: _____ Through family: _____ Clubs: _____ Other: _____

102. Are most of your friends working? Yes ____ No ____ DK ____

103. Do you belong to any groups in the community? _____

104. In your opinion, in what ways have your seizures been a handicap to you?

INTERVIEWER'S IMPRESSIONS

105. (a) Appearance

(b) Intelligence

(c) Personality

(d) Employability

(e) Cooperation

(f) Accurancy of Information Given

(g) Other

APPENDIX B

Employment Histories of Ten Group A Patients

APPENDIX B

Employment Histories of 10 Group A Patients

Mr. A: age 29; single; onset of seizures at 16 years; completed 8th grade; began work age 16. (1) Assistant bartender - 9 months -- left for better wages, although had no job waiting .... unemployed for 3 years; (2) Clerical work for restaurant - 4 1/2 months -- left to apply for course in teletyping ... unemployed for several weeks; (3) General work at office of the telecommunications school while waiting for an opening to train there - 7 months -- left because he thought the irregular work hours provoked seizures .... unemployed for 1 1/2 years; (4) Accounting clerk - 6 months -- let go for "unsatisfactory work" ... unemployed for 5 years.

Miss W: 37; single; onset - 14 years; completed 6th grade; commenced work at age 15 on stepfather's farm. (1) Farm work - 8 years -- left when farm sold at stepfather's death; (2) Live-in housekeeper for parish priest - 3 years -- left because "townspeople talking about her" .... unemployed for 3 years; (3) Brief typing training at Rehabilitation Institute - gave this up when injured finger - began training in sewing - gave this up when eyesight began to fail; (4) Tray girl in department store cafeteria - 5 weeks -- left on medical advice because of a gynecological condition ... unemployed for 3 months. Not interested in obtaining work as thinks it aggravates seizure condition.

Mr. O: 37; separated; onset - age 25; completed 10th grade; commenced work - age 17. (1) Machine operator at toy factory - 1 year -- terminated when factory closed; (2) Sheet metal cutter - 4 1/2 years -- left for job offering better wages; (3) Machine operator in tobacco factory - 10 years -- left to enter hospital because of very frequent seizures -- employer would not allow him to return to work with the company although his seizures under control .... unemployed for 4 years.

Mr. F: 56; separated; onset of seizures - age 6; completed 4th grade; began work at age 12. (1) Farm work - 11 years; (2) Beekeeper - several months -- left when employer sold business; (3) Sheet metal worker's helper - several months; (4) Painter - 1 1/2 years -- job ended .... undetermined period of unemployment; (5) Press helper in munitions factory - 2 years -- let go when the War was over .... unemployed for an undetermined period; (6) Cleaner in factory - 2 years -- fired when "another employee made trouble for him" .... unemployed for 6-8 years.

Mr. X: 52; married; onset - age ?; commenced work - age 17. (1) Loaded fruit trucks - 9 years -- left to begin own business; (2) Part owner of fruit store - 4 years -- went bankrupt; (3) Army - 1 year; (4) Driver for grocery store - 8 1/2 years ... unemployed for 2 years; (5) General work at biscuit company - several months; (6) Civilian medical corps - several months; (7) Private policeman - several months -- fired because of seizures; (8) Mechanic - 1 year; (9) Watchman at jail/hospital - 1 year -- fired because of disagreements with supervisor and attack of "liver trouble" .... unemployed for 4 years.

Mr. I: 32; separated; onset - age 22; completed 6th grade; commenced work - age 16. (1) Messenger boy - several months; (2) General work in grocery store - 3 years -- left for job at tram company; (3) Sweeper and cleaner at tram company - 6 years -- left because of "nervous breakdown" - advised by company physician to take time off .... unemployed for 8 years. Not interested in obtaining employment.

Mr. D: 45; married; onset - age 21; completed 9th grade; began work - age 16; (1) Truck driver (Gaspé); (2) Auto mechanic (Gaspé) - 10 years -- left to come to Montreal to have treatment for seizures; (3) Two jobs in factories - short duration -- asked to leave both because of seizures .... unemployed for undetermined number of months or years while having frequent seizures; (4) Fixed office machines in social agency where wife works as typist (wife obtained job) - 1 month -- left to trainfor electrical repair trade; (5) Trade school - 1 1/2 years -- obtained diploma; (6) Repaired electrical appliances at department store - several months -- left because pressure of work made him too nervous; (7) Repair work at small radio store - 1 year -- fired because business bad .... unemployed for 3 years; (8) Bank messenger - 14 months - to present.

Mr. T: 32; married; onset - age 12; completed 7th grade; commenced work - age 16; (1) Made switches at factory, appointed gang boss - several months -- left for better wages; (2) Helper on milk truck - 1 year -- left because disliked early rising; (3) Apprenticed in plumbing and heating trade - 5 years; (4) Machine operator with electric company - 5 years -- laid off twice - once for 10 months -- suffered 2 seizures on the job and was banned from machinery work until produced note from physician - rehired after each layoff .... unemployed for 6 months when refused to return after third layoff; (5) House painter, snow removal, truck driving while collecting unemployment insurance - 6 months; (6) Plumbing and heating maintenance at hospital - 3 years - to present.

Mrs. L: 35; separated; onset at age 17; completed 7th grade; commenced work at age 14; (1) Saleslady - 2 1/2 years -- fired when refused to work on Saturdays .... unemployed for 6 months; (2) Sales work - 1 1/3 years -- left when new manager arrived with whom she could not get along .... unemployed for several months; (3) Clerical work in department store - 4 years -- left to leave town to avoid persistent suitor .... unemployed for 1 year, living with aunt in Toronto; (4) Clerical work - 1 year -- left when became engaged .... unemployed for undetermined period - engagement broken when fiance became aware of her seizures; (5) Clerical work - 3 months -- left because did not get along with other employees; (6) Married and not working for 6 months - then separated; (7) Clerical and insurance claims - part-time for 2 years; (7) Last-mentioned position - full-time for 14 months.

Mr. E: 48; married; onset of seizures - age 37; completed 10th grade; began work at age 17. (1) Fishing with father off Banks of Newfoundland - several years; (2) Learned electrical trade in Montreal; (3) Elevator repair and electrical work at car park - 9 years -- left when firm sold; (4) Elevator work in grain elevator - 9 years -- drank heavily with fellow workers - developed seizures and was hospitalized in Allan Memorial Institute for alcoholic problem .... unemployed for 6-9 months; (5) General work at grain elevator - 6 months - awaiting medical approval of his return to elevator repair work.

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