

Academic and employment insertion as a factor related to quality of life in patients with drug-resistant temporal lobe epilepsy

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Introduction. Academic and employment insertion is one of the issues that most concern people with epilepsy, but little is known about its relationship with quality of life.

Aim. We aimed to analyze the effects of the academic and employment insertion on quality of life, anxiety, depression, social support, and executive functions, and the relationships among these variables in patients with drug-resistant epilepsy.

Patients and methods. Fifty-nine patients with drug-resistant temporal lobe epilepsy were classified into two groups: with academic or employment insertion ($n = 25$) and without insertion ($n = 34$) and underwent a neuropsychological evaluation.

Results. Patients with insertion had a significantly better quality of life, lower trait anxiety, and higher social support, and tended to have a lower percentage of errors and higher percent conceptual level responses than those without insertion. Academic/employment insertion had indirect effects on quality of life through its relationship with global social support and trait anxiety.

Conclusions. Our findings provide a model for understanding the quality of life in patients with temporal lobe epilepsy for an integral perspective of the patient and points out the key role of increased social support and reduced anxiety associated with academic and employment insertion to improve quality of life. These results could favor the implementation of programs that promote academic or employment reinsertion, considering the relevance of socio-emotional domains.

Key words. Anxiety. Executive functions. Quality of life. Social insertion. Social support. Temporal lobe epilepsy.

Introduction

Academic or employment insertion has been related to better executive functioning [1] and lower anxiety and depression in healthy samples [2]. These activities are frequently restricted in epilepsy patients [3,4], chronic stress conditions [5,6] (e.g., high seizure frequency [7] or social discrimination [8]) being relevant factors. Temporal lobe epilepsy (TLE) is the most common type of drug-resistant epilepsy and is frequently associated with emotional and cognitive deficits [6]. Although employment insertion or educational level have been related to better executive functioning [9] and reduced anxiety and depression [10,11] in mixed samples of epilepsy patients, there are no studies in TLE patients.

TLE patients suffer a high prevalence of depression and anxiety [11], and cognitive impairments [12]. The high frequency of memory deficits in

these patients [13] has led to focus on this domain to the detriment of others such as executive functions [14], which are also compromised [15] and are relevant in settings of conflict solving, planning, organizing, and decision making [16] such as academic and employment contexts [17]. It should be noted that academic or employment insertion may be a potential source of social support in TLE patients. Social support promotes well-being [18] and has been related to a better quality of life (QOL) in TLE patients [19], low anxiety and depression [19, 20], and better executive functioning [21].

In terms of QOL, the results of previous studies about their potential relationship with insertion are intriguing. On the one hand, higher education level has been related to better QOL in patients with drug-resistant epilepsy [22], and employment insertion is a reliable predictor of QOL in a mixed sample of epilepsy patients [23]. On the other hand,

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a lack of association between academic insertion and QOL has been found in patients with different epilepsy types [23]. Demographic or social-emotional variables could explain, at least in part, the heterogeneity of the results.

Aim

This study aims to analyze differences in QOL, anxiety, depression, social support, and executive functions depending on academic/employment insertion in patients with TLE. We hypothesize that patients with insertion will have better QOL, lower anxiety and depression, and higher social support and executive functioning than those without insertion. Additionally, we aim to investigate the relationships among these variables.

Patients and methods

Patients

This is a cross-sectional study. Patients were recruited from the Refractory Epilepsy Unit, Hospital Universitario y Politécnico La Fe. The study was conducted following the Declaration of Helsinki and approved by the ethics committee of the hospital. Informed consent was obtained from participants. Our reporting followed the STROBE guidelines [24]. The inclusion criteria comprised: a) drug-resistant TLE; b) candidates for epilepsy surgery; c) chronological age of at least 18 years; d) and a neuropsychological assessment performed before surgery. Excluded were patients: a) older than 65 years; b) with severe cognitive impairment; and c) with severe psychiatric conditions.

Procedure

Demographic and clinical data were collected. Pre-surgical assessment included the diagnosis of the epilepsy type and the lateralization of the epileptogenic area based on seizure history and semiology, neurologic assessment, video-electroencephalography (EEG) monitoring, 3-Tesla magnetic resonance imaging (MRI), psychiatric assessment, and neuropsychological evaluation. Fluorodeoxyglucose (FDG)-positron emission tomography (PET), single-photon emission computed tomography (SPECT), and intracranial EEG recording were performed selectively. Neuropsychological evaluation was carried out 3 months before surgery.

Neuropsychological assessment

The Quality of Life in Epilepsy Inventory (QOLIE-31) [25] is composed of 31 items divided into seven subscales: emotional well-being, social functioning, energy, cognitive self-rating, *seizure worry*, medication effects, and overall QOL. Scores for each subscale ranged from 0 to 100, higher scores indicating better QOL. A QOL composite score was computed by using a weighted average of subscales. Cronbach's alpha ranges from 0.55 to 0.92 [26].

The trait anxiety scale of the State-Trait Anxiety Inventory (STAI-T) [27] includes 20 items rated on a four-point scale, higher scores indicating higher trait anxiety levels. Cronbach's alpha is 0.94 [28].

The Depression Beck Inventory-II (BDI-II) [29] is composed of 21 items rated on a four-point scale, higher scores indicating higher depression levels. Cronbach's alpha is 0.89 [30].

The Medical Outcomes Study Social Support Survey (MOS) [18] includes 20 items rated on a five-point scale divided into four subscales: emotional, instrumental and affectionate support, and positive social interaction. Global social support was obtained by the sum of the four subscales. Cronbach's alpha ranges from 0.91 to 0.97 [18].

The Wisconsin Card Sorting Test (WCST) [31] was used to evaluate cognitive flexibility, abstract conceptualization, and responsiveness to feedback. Higher scores indicated worse performance in the following indices: number of trials, percentage of errors, perseverative responses and errors, nonperseverative errors, trials to complete the first category, and failure to maintain set. Additionally, higher scores showed better performance in the following indices: correct responses, percentage of conceptual level responses, categories completed, and learning to learn.

Statistical analyses

The Kolmogorov-Smirnov test was performed to examine data normality. *t*-tests for independent samples and chi-square test were performed for between-group comparisons on patients characteristics.

Univariate ANOVAs were performed to investigate differences in QOL, anxiety, depression, and executive functions depending on insertion, considering age as covariate. Bonferroni tests were performed as post hoc analyses. Pearson correlations were performed to examine relationships among variables. Finally, we tested a mediation model using PROCESS (v3.4.) macro, in which academic/

employment insertion was included as an independent variable, global social support, trait anxiety, and percent of conceptual level responses as the mediator variables, and QOL as the dependent variable, adjusting for age. A bias-corrected 95% bootstrap-confidence interval CI (5,000 iterations) was used. To estimate the effect sizes of indirect effects, we used the percent mediation (PM) index, which indicates the proportion of the indirect effect compared to the total effect [32]. Statistical analyses were carried out using SPSS 25.0, and two-tailed tests with p set at 0.05 were considered significant.

Results

Sample characteristics

The sample is composed of 59 adults with drug-resistant TLE (mean age = 39.49, SD = 12.39). Participants were classified into two groups: with academic/employment insertion ($n = 25$), 19 patients working and eight studying, and without insertion ($n = 34$) (Table I).

Academically/occupationally active patients were younger than those inactive ($p < 0.001$). No other differences were found in participants characteristics, even considering only patients with university studies.

Differences in QOL, anxiety, depression, social support, and executive functions depending on academic/employment insertion (Table II)

Significant differences were found on QOL composite score ($F(1,58) = 5.84$, $p = 0.019$, $n_p^2 = 0.09$), social functioning ($F(1,58) = 7.58$, $p = 0.008$, $n_p^2 = 0.12$) and cognitive self-rating ($F(1,58) = 6.90$, $p = 0.011$, $n_p^2 = 0.11$) depending on academic/employment insertion, patients with insertion having higher scores than those without insertion (for all, $p < 0.02$; Fig. 1). No significant differences were found in other QOL subscales.

Patients with academic/employment insertion had significantly lower anxiety than those without insertion ($F(1,58) = 4.03$, $p = 0.04$, $n_p^2 = 0.07$), with no differences in depression.

Significant differences were found depending on academic/employment insertion in global social support ($F(1,58) = 4.03$, $p = 0.049$, $n_p^2 = 0.07$), emotional support and positive social interaction ($F(1,58) = 6.47$, $p = 0.014$, $n_p^2 = 0.10$; $F(1,58) = 5.00$, $p = 0.029$, $n_p^2 = 0.08$), patients with insertion having higher scores (for all, $p < 0.049$).

Table I. Characteristics of groups based on academic/employment insertion –mean \pm SD or n (%)–.

	With academic or employment insertion ($n = 25$)	Without academic or employment insertion ($n = 34$)	Total ($n = 59$)	p
Age (years)	33.68 \pm 11.37	43.76 \pm 11.46	39.49 \pm 12.39	0.001
Sex				0.99
Male	11 (18.6%)	15 (25.4%)	26 (44.1%)	
Female	14 (23.7%)	19 (32.2%)	33 (55.9%)	
Handedness				0.34
Right	20 (33.9%)	30 (50.8%)	50 (84.7%)	
Left	5 (8.5%)	3 (5.1%)	8 (13.6%)	
Mixed	0 (0%)	1 (1.7%)	1 (1.7%)	
Educational level				0.09
Primary education	1 (1.7%)	3 (5.1%)	4 (6.8%)	
Secondary education	6 (10.2%)	18 (30.5%)	24 (40.7%)	
Lower-university education	10 (16.9%)	7 (11.9%)	17 (28.8%)	
University education	8 (13.6%)	6 (10.2%)	14 (23.8%)	
Marital status				0.21
Single	15 (25.4%)	13 (22%)	28 (47.5%)	
Married	9 (15.3%)	17 (28.8%)	26 (44.1%)	
Divorced/separated	1 (1.7%)	4 (6.8%)	5 (8.5%)	
Household members				0.15
Parents	11 (18.6%)	7 (11.9%)	18 (30.5%)	
Partner	12 (20.3%)	24 (40.7%)	36 (61%)	
Living alone	2 (3.4%)	3 (5.1%)	5 (8.5%)	
Side of the seizure focus				0.65
Left	14 (23.7%)	17 (28.8%)	31 (52.5%)	
Right	11 (18.6%)	17 (28.8%)	28 (47.5%)	
Age at epilepsy onset (years)	15.72 \pm 11.01	15.73 \pm 12.34	15.72 \pm 11.7	0.99
Etiology of pathology				0.81
HS	7 (11.9%)	14 (23.7%)	21 (35.6%)	

Table 1. Characteristics of groups based on academic/employment insertion –mean \pm SD or n (%)–. (cont.).

	With academic or employment insertion ($n = 25$)	Without academic or employment insertion ($n = 34$)	Total ($n = 59$)	p
FCD	3 (5.1%)	2 (3.4%)	5 (8.5%)	
Meningeom	0 (0%)	1 (1.7%)	1 (1.7%)	
Glios	1 (1.7%)	1 (1.7%)	2 (3.4%)	
Tumor	5 (8.5%)	4 (6.8%)	9 (15.3%)	
Heteroterapia	1 (1.7%)	2 (3.4%)	3 (5.1%)	
Cavernoma	1 (1.7%)	3 (5.1%)	4 (6.8%)	
Encephalomacy	1 (1.7%)	0 (0%)	1 (1.7%)	
Hippocampal atrophy	0 (0%)	1 (1.7%)	1 (1.7%)	
Nonassessable	1 (1.7%)	2 (3.4%)	3 (5.1%)	
Nonespecific	5 (8.5%)	4 (6.8%)	9 (15.3%)	
Number of ASMs	2.64 \pm 0.76	2.76 \pm 0.99	2.71 \pm 0.89	0.6
Seizures per month	18.68 \pm 34.88	14.06 \pm 28	16.02 \pm 30.9	0.58
Seizure type				0.29
SPS	1 (1.8%)	2 (3.5%)	3 (5.1%)	
CPS	14 (24.6%)	12 (21.1%)	26 (45.6%)	
GTCS	0 (0%)	1 (1.8%)	1 (1.8%)	
SPS + CPS	5 (8.8%)	5 (8.8%)	10 (17.5%)	
CPS + GTCS	4 (7%)	9 (15.8%)	13 (22.8%)	
SPS + CPSd + GTCS	0 (0%)	4 (7%)	4 (7.0%)	

CPS: complex partial seizure; FCD: focal cortical dysplasia; GTCS: secondary generalized seizures; HS: hippocampal sclerosis; SPS: simple partial seizure.

No significant differences in WCST scores were found, although patients with academic/employment insertion tended to have lower percentage of errors ($F(1,58) = 3.33$, $p = 0.07$, $n_p^2 = 0.06$) and higher percent conceptual level responses ($F(1,58) = 3.33$, $p = 0.07$, $n_p^2 = 0.06$).

When we examined differences depending on employment insertion separately, differences in these QOL, anxiety, social support variables remained significant between patients who were work-

ing concerning those not working. Additionally, patients who were working had significantly lower percentage of errors ($F(1,58) = 4.47$, $p = 0.039$, $n_p^2 = 0.07$) and higher percent conceptual level responses ($F(1,58) = 4.10$, $p = 0.048$, $n_p^2 = 0.07$). Given the limited patients that were studying ($n = 8$), we cannot analyze the effect of academic insertion separately.

Relationships among variables

QOL composite score was negatively related to anxiety ($p < 0.0001$), and positively to global social support, emotional support, positive social interaction, and percent of conceptual level responses (for all, $p < 0.03$). Cognitive self-rating was negatively related to anxiety and positively related to positive social interaction (for all, $p < 0.04$). Social functioning was negatively associated with anxiety ($p = 0.04$). Additionally, anxiety was negatively related to global social support, emotional support, and positive social interaction subscales, and percent of conceptual level responses (for all, $p < 0.005$). No other significant associations were found.

Mediation analyses adjusted for age showed significant indirect effects of academic/employment insertion on QOL composite score via global social support and anxiety ($path a_1 d_{21} b_2$: $B = -3.25$, $SE = 1.94$, 95% CI = $-7.85, -0.28$; $P_{M ind} = 1.34$) (Figure 2). Specifically, academic/employment insertion was related to global social support ($path a_1$: $B = -10.90$, $SE = 5.43$, $t = -2.01$, $p = 0.049$), global social support was associated with anxiety ($path d_{21}$: $B = -0.35$, $SE = 0.08$, $t = -4.12$, $p < 0.0001$), and anxiety was related to QOL composite score ($path b_2$: $B = -0.85$, $SE = 0.11$, $t = -7.52$, $p < 0.00001$). A significant total effect of academic/employment insertion on QOL was found ($path c$: $B = -2.42$, $SE = 4.24$, $t = -2.42$, $p = 0.019$), but not a significant direct effect ($path c'$: $B = -4.46$, $SE = 3.04$, $t = -1.47$, $p = 0.15$). No significant mediational effects of percent of conceptual level responses were found.

Discussion

Our findings indicate that patients with TLE with academic/employment insertion have significantly better QOL, lower anxiety, and higher social support than those without insertion, this insertion being indirectly associated with QOL through its relationship with social support and anxiety.

Patients with insertion were younger than the other group, but did not differ in other characteristics (e.g., seizure frequency). Even considering only

patients with university studies, no significant differences were found in the frequency of seizures depending on insertion. Patients with drug-resistant epilepsy have difficulties dealing with the academic and employment worlds [3], and our results indicate that age is an important factor to understand interindividual differences in insertion.

Although differences in seizure type did not reach statistical significance, 14 patients without insertion had secondary generalized seizures, compared to four patients with insertion, whereas the frequency of other seizure types was similar in both groups. Secondary generalized seizures may imply more severe injuries [33] and social stigma [34, 35]. Patients with epilepsy perceive that unemployment is more linked to social factors, such as fear of having seizures at work or stigma [8], so participants with secondary generalized seizures may be more likely to be unemployed via social stigmatization [36].

To minimize the impact of age on insertion, we considered the academic and employment insertion together. Patients with academic or employment insertion had better QOL than those without it, even when employment insertion was considered separately [23].

The subscales of QOL showed different sensitivities to insertion. Patients with insertion had higher social functioning and cognitive self-rating than those without insertion but did not differ in the rest of QOL subscales. This highlights the complexity of the construct [19], being a key aspect in the neuropsychological intervention [35], that could be conditionate for emotional, social, and cognitive areas [18, 37-38], so differences in these areas depending on insertion were evaluated.

Patients with academic/employment insertion had lower anxiety than those inactive, without differences in depression, and these results were maintained when employment insertion was considered separately. As far as we know, no other studies have examined anxiety and depression depending on academic insertion in patients with epilepsy. Regarding employment insertion, our results are partially in line with those of Mensah et al. [10] and Peterson et al. [11], which found that it was related to reduced anxiety and depression in a mixed sample of patients with epilepsy. We considered trait anxiety instead of clinical anxiety and our sample had subclinical levels of depression [39], so the use of a clinical depression instrument in this sample may have made it difficult to find differences.

Patients with academic/employment insertion also reported higher social support than those with-

Figure 1. Differences in QOL depending on academic/employment insertion. * $p < 0.05$; error bars represent 95% confidence intervals.

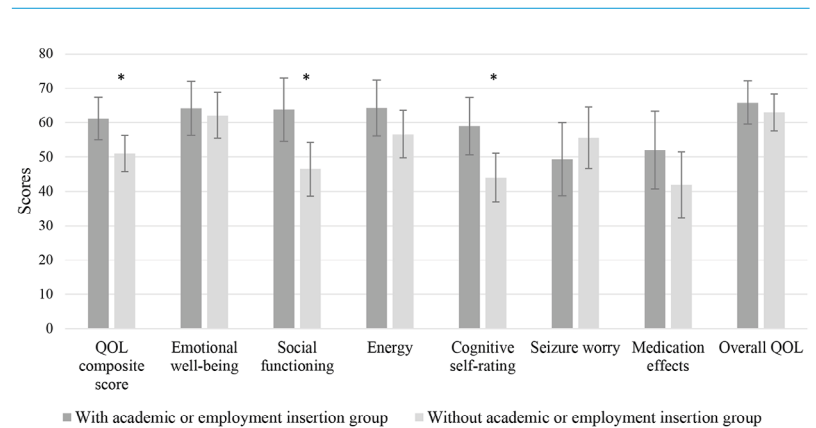
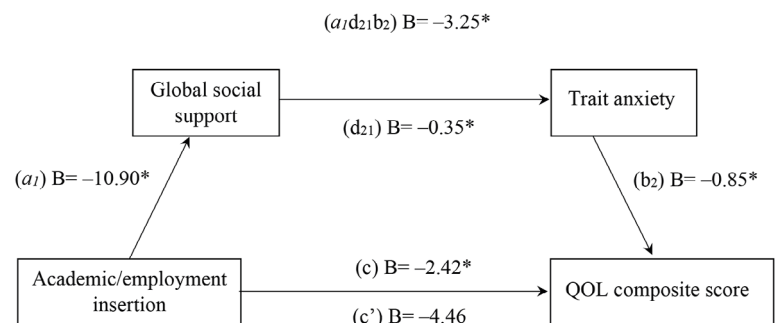


Figure 2. Model assessing the mediation effect of global social support and trait anxiety in the association between academic/employment insertion and QOL composite score adjusted for age. The variance of QOL composite score explained by this model is 13%; $R^2 = 0.13$, $p = 0.01$. * $p < 0.05$.



out it, and these results remained significant when employment insertion was considered separately. Social networks, which increase in the work environment, are relevant sources of social support, may imply social acceptance [40], and favour coping with epilepsy [41]. The role of social support in epilepsy may be more significant than in other chronic diseases [42].

Patients with academic/employment insertion tended to have better executive functioning than those inactive, although these results only reached statistical significance when employment insertion was considered separately. Executive functioning measured with WCST was related to work behavior in other chronic stressed populations [43]. Fraser et al. [9] found that a cognitive task that requires

Table II. QOL, anxiety, depression, social support, and executive function scores (mean \pm SD) depending on academic/employment insertion.

	Total (<i>n</i> = 59)	With academic or employment insertion (<i>n</i> = 25)	Without academic or employment insertion (<i>n</i> = 34)	<i>p</i>
QOL				
Emotional well-being	62.98 \pm 18.39	63.96 \pm 19.78	62.26 \pm 17.58	0.71
Social functioning	53.8 \pm 23.3	64.36 \pm 23.39	46.03 \pm 20.25	0.01
Energy	59.88 \pm 19.43	64.6 \pm 18.02	56.41 \pm 19.96	0.18
Cognitive self-rating	50.34 \pm 21.1	59.6 \pm 18.03	43.53 \pm 20.82	0.01
Seizure worry	52.94 \pm 24.87	49 \pm 25.16	55.84 \pm 24.62	0.4
Medication effects	46.15 \pm 26.8	51.88 \pm 28.2	41.94 \pm 25.32	0.19
Overall QOL	64.22 \pm 14.89	66.6 \pm 12.78	62.47 \pm 16.23	0.51
QOL composite score	55.32 \pm 15.52	61.76 \pm 12.04	50.58 \pm 16.24	0.02
STAI-T	26.49 \pm 13.91	21.8 \pm 9.51	29.94 \pm 15.65	0.05
BDI	11.92 \pm 8.88	9.64 \pm 8.14	13.59 \pm 9.14	0.28
MOS				
Global social support	75.9 \pm 19.27	82.16 \pm 14.03	71.29 \pm 21.4	0.05
Emotional social support	31.73 \pm 9.09	35.28 \pm 4.92	29.12 \pm 10.54	0.01
Instrumental social support	16.81 \pm 4.03	18.28 \pm 2.48	15.74 \pm 4.61	0.06
Positive social interactions	15.86 \pm 4.27	17.36 \pm 2.91	14.76 \pm 4.79	0.03
Affective support	12.76 \pm 2.79	13.24 \pm 1.94	12.39 \pm 1.94	0.22
WCST				
Number of trials	102.47 \pm 24.65	98.48 \pm 26.23	105.41 \pm 23.39	0.31
% errors	29.68 \pm 16.45	24.44 \pm 12.21	33.53 \pm 18.2	0.07
% de respuestas perseverativas	21.25 \pm 19.53	16.08 \pm 14.16	25.06 \pm 22.12	0.24
% perseverative responses	18.25 \pm 15.03	14.48 \pm 11.14	21.03 \pm 16.97	0.24
% non perseverative errors	10.71 \pm 7.46	9.52 \pm 5.49	11.58 \pm 8.6	0.19
Trials to complete first category	18.34 \pm 26.03	12.4 \pm 4.35	22.71 \pm 33.62	0.43
Failures to maintain set	0.59 \pm 2.05	0.96 \pm 1.34	0.32 \pm 2.43	0.33
Correct responses	70.54 \pm 13.84	73.56 \pm 12.06	68.32 \pm 14.8	0.22
% conceptual level responses	60.59 \pm 22.5	67.96 \pm 14.81	55.16 \pm 25.67	0.07
Categories completed	5.05 \pm 1.98	5.48 \pm 1.16	4.74 \pm 2.38	0.26
Learn to learn	-3.74 \pm 8.3	-2.49 \pm 8	-4.78 \pm 8.53	0.24

BDI-II: Depression Beck Inventory-II; MOS: Medical Outcomes Study Social Support Survey; STAI-T: trait anxiety scale of the State-Trait Anxiety Inventory; WCST: Wisconsin Card Sorting Test.

cognitive flexibility discriminated between patients with different epilepsy types who entered or not into the job market. It is unclear whether employment insertion favors executive function performance, or participants with better executive functioning have better employment insertion, so longitudinal studies are needed to clarify cause-effect relationships.

Executive functioning was related to better QOL, but no significant mediational effects were found in the relationship between academic/employment insertion and QOL. However, academic/employment insertion was related to higher social support, which was associated with lower anxiety, and this was related to better QOL. This suggests that networks created through insertion could increase perceived social support, which in turn would reduce anxiety, which would be related to a better QOL. High perceived social support has been related to lower anxiety in mixed patients of epilepsy [44], and lower anxiety has been associated with better QOL [19]. Our results propose a new model that allows an integral understanding of the patients' QOL in TLE, considering both direct and indirect effects of socio-emotional variables.

Some limitations should be considered. Due to the cross-sectional nature of the data, we cannot conclude causality in the relationships. Additionally, larger sample sizes could provide more information, ensuring statistical power. Moreover, executive function is a complex cognitive domain, so the inference of executive function only from WCST scores should be considered with caution [45]. Future studies should expand the neuropsychology assessment battery. Finally, although our anxiety and depression scores could be useful for detecting susceptibilities to clinical disorders [6], they are not clinical/diagnostic measures [46].

Conclusions

This study emphasizes the relevance of academic and employment insertion on QOL, trait anxiety, and social support in TLE patients, and provides a model that points out the key role of increased social support and reduced anxiety associated with insertion to improve QOL. Social support may buffer the negative impact of stressful events and chronic health conditions [47], while high anxiety could contribute to individual differences stress vulnerability [48]. Our findings could contribute to optimal care in TLE patients, favoring the implementation of programs that promote academic/em-

ployment reinsertion, considering socio-emotional and cognitive domains.

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La inserción académica y laboral como un factor asociado a la calidad de vida en pacientes con epilepsia farmacorresistente del lóbulo temporal

Introducción. La inserción académica y laboral es uno de los problemas que más preocupan a las personas con epilepsia, pero permanece sin esclarecer su relación con la calidad de vida.

Objetivo. Analizar los efectos de la inserción académica y laboral en la calidad de vida, la ansiedad, la depresión, el apoyo social y las funciones ejecutivas, así como la relación entre estas variables en pacientes con epilepsia farmacorresistente.

Pacientes y métodos. Cincuenta y nueve pacientes con epilepsia farmacorresistente del lóbulo temporal fueron clasificados en dos grupos, con inserción académica o laboral ($n = 25$) y sin inserción ($n = 34$), y se les realizó una evaluación neuropsicológica.

Resultados. Los pacientes con inserción presentaron una calidad de vida significativamente mayor, menor ansiedad rasgo y mayor apoyo social percibido, así como una tendencia a tener un menor porcentaje de errores y un mayor porcentaje de

respuestas conceptuales que los pacientes sin inserción laboral. La inserción académica/laboral tuvo efectos indirectos en la calidad de vida a través de su relación con el apoyo social y la ansiedad rasgo.

Conclusiones. Nuestros hallazgos ofrecen un modelo para entender la calidad de vida en los pacientes con epilepsia del lóbulo temporal desde una perspectiva integral del paciente y señalan el papel clave del aumento del apoyo social y de la reducción de la ansiedad asociados con la inserción académica y laboral para mejorar la calidad de vida. Estos resultados podrían favorecer la implementación de programas que promuevan la reinserción académica o laboral, considerando la relevancia de variables socioemocionales.

Palabras clave. Ansiedad. Apoyo social. Calidad de vida. Epilepsia del lóbulo temporal. Funciones ejecutivas. Inserción social.