Summary. The problem of addictions is a clear and evident reality, which is suffered by different cultures at a global level. Excessive consumption of substances, apart from its repercussions in the health area, has a consequent impact on society as a whole. Therapeutic communities (TCs) are a treatment modality for many people with substance addiction problems. They address, from multiple perspectives, the symptomatic symptoms present in users. On many occasions, exacerbated drug use leads to the development of a dual pathology (DP), which is defined as an association between two clinical foci: a mental disorder (MD) accompanied by a substance use disorder (SUD). Given this phenomenon, the present study aims to analyze the effectiveness of a psychoeducational intervention on the quality of life of people with PD, users of a TC (Projecte Home Balears). The selected sample is divided into two groups: experimental and control. The quality of life studied was assessed by means of four tests: the Beck Anxiety Inventory (BAI), the Rosenberg Self-Esteem Scale, the Hamilton Depression Scale (HDRS), and the EPQ-RA Personality Questionnaire (abbreviated version). It is concluded that PE is effective in decreasing reported levels of anxiety and depression. The personality and self-esteem constructs remain stable for both groups.

Key words: Psychoeducation, Addictions, Dual Pathology, Therapeutic Community.
tratamiento para numerosas personas con problemas de adicciones a diversas sustancias. En ellas se abordan, desde múltiples perspectivas, los cuadros sintomáticos presentes en los usuarios. En muchas ocasiones, el consumo exacerbado de drogas deviene en el desarrollo de una patología dual (PD), la cual se define como aquella asociación entre dos focos clínicos: un trastorno mental (TM) acompañado de un trastorno provocado por el uso de sustancias (TUS). Habida cuenta de este fenómeno, el presente estudio tiene por objeto analizar la eficacia de una intervención psicoeducativa en la calidad de vida de personas con PD, usuarias de una CT (Projecte Home Balears). La muestra seleccionada se divide en dos grupos: experimental y control. Por su parte, la calidad de vida estudiada se evalúa a través de cuatro pruebas: el Inventario de Ansiedad de Beck (BAI), la Escala de Autoestima de Rosenberg, la Escala de Depresión de Hamilton (HDRS), y el Cuestionario de Personalidad EPQ-RA (versión abreviada). Se concluye que la PE es eficaz para disminuir los niveles reportados de ansiedad y depresión. Los constructos personalidad y autoestima se mantienen estables para ambos grupos.

Palabras clave: Psicoeducación, Adicciones, Patología Dual, Comunidad Terapéutica.

Introduction

Drug addiction or substance addiction is a chronic, relapsing brain disease determined by compulsive drug seeking and use, despite all the harmful consequences. Addiction is associated with impairment in various aspects of psychological, physical and socio-occupational functioning. It is an entrenched problem throughout the world and all societies, directly responsible for millions of deaths, as well as multiple cases of human immunodeficiency virus (HIV) infection (Singh and Gupta, 2017). Another more succinct definition, however, emphasizes the imperative need to consume a substance to experience the reward it produces; whether it is of natural or synthetic origin (Corvalán, 2017). The figure of the addict is, according to Escohotado (1998), a social archetype because of the addict character itself. It is a figure subject to a less variable evolution, being of a historical nature. For less than two centuries, the addict has ceased to be a moral agent and has become an incurably ill person who deserves public scorn. Society's image of the addict has changed over the course of the 20th century. Polarization around the dichotomy of opinion about addicted people is frequent; moving between compassion or punishment (Bordoy, 1994). According to the United Nations Office on Drugs and Crime (UNDOC, 2018) World Drug Report: 585,000 people died as a result of drug use in 2017. 35 million people suffer from drug-related disorders and require treatment services. Of these only 1 in 7 received treatment, given the often poorer quality of services; yet 47% of new HIV infections globally in 2017 occurred among the key (consumer) population and their partners. People who inject drugs are 23 times more likely to acquire the HIV virus than the rest of the adult population. Regarding the current situation in our country (Spanish Observatory on Drugs and Addictions, 2021), 93% of the population between 15 and 64 years of age states that they have consumed alcoholic beverages at some time in their lives, making alcohol the psychoactive substance with the highest prevalence of consumption. This indicator manifests an increase with respect to the 2017 data (91.2%). After alcohol, tobacco is the second most widely consumed psychoactive substance in Spain. Seventy percent stated having smoked tobacco at some time in their lives, showing stability with respect to 2017, as there was a slight increase (69.7%). Regarding hypnosedatives with or without prescription the prevalence of ever use in life is located at 22.5%, revising an increase of 1.7 percentage points compared to 2017. Regarding illegal drugs, cannabis appears, by far, as the most widespread psychoactive substance in Spain. Seventy percent stated having smoked tobacco at some time in their lives, showing stability with respect to 2017, as there was a slight increase (69.7%). Regarding hypnosedatives with or without prescription the prevalence of ever use in life is located at 22.5%, revising an increase of 1.7 percentage points compared to 2017. Regarding illegal drugs, cannabis appears, by far, as the most widespread in our country; since it continues the growing trend of consumption registered since 2013, obtaining in 2019 the maximum value of the historical record (37.5%). Cocaine is the second most consumed illegal drug within our borders. 11.2% of the population aged 15 to 64 years old acknowledges having consumed it at some time in their lives; increasing by almost 1 percentage point compared to the data recorded in 2017. At present, given the different
theoretical lines that attempt to explain the phenomenon, the scientistic theoretical prism is particularly relevant, which will make use of a series of concepts such as neuroplasticity and reward mechanisms. Neuroplasticity, on the other hand, implies the capacity of the nervous system to adapt to new environmental conditions, thus allowing modifications in behavior and survival strategies (Apud, 2016). This is where "reward mechanisms" come into play, linked to the brain's way of promoting adaptive utility behaviors-feeding or reproduction-through mechanisms linked to pleasure. The hedonic reward effect is mediated by the dopaminergic system, which involves the mesolimbic-cortical pathways: ventral tegmental area of the midbrain, projections to the limbic system, and other areas, including the prefrontal cortex (De Sola et al., 2013; Rodriguez et al., 2003). For the authors Platt et al. (2010) drugs act on the neuroplasticity of dopaminergic reward circuits, altering these weighting mechanisms, so that they would interpose themselves between the reward and the adaptive behavior; substituting the latter by the mere pleasure of consumption.

Therapeutic communities for the treatment of addictions

The term therapeutic community (TC) was coined within psychiatric hospitals in the United Kingdom during the 1950s. Subsequently, a decade later, it began to be used to refer to certain drug-free residential treatments (Llorente del Pozo and Fernández, 1999). A TC, understood as an institution dedicated to the treatment of addictive behaviors, is embedded in the "abstentionist paradigm" and, therefore, advocates that the individual addicted to substances is a sick person whose "cure" will only be achieved if he or she manages to stop consuming certain substances. TC, as an instrument of change and approach to addiction, adheres to a simplified model of a social system, as the driving force and catalyst of the therapeutic process. Within this model, all the events occurring in daily life, in its interior, are directed, in the same way, to the achievement of a therapeutic result in the patient's rehabilitation process (López, n. d.). In this sense, it is precisely the use of the community that vertebrates the treatment, added to the treatment staff and those people in the process of recovery (Farah and Balaguer, 2018). In a schematic way, and trying to synthesize the arguments of their main advocates, the Therapeutic Communities pursue two main objectives (López, n. d.): 1. To transform the behavioral component of the user, providing him/her with the necessary tools so that he/she can face environmental, emotional and social conflicts that predispose to substance use with expectations of success. 2. Restructuring or resocializing the patient or user, so that he/she is able to internalize and put into practice the principles and values inherent to the community, as key elements for reintegration into society and development of a healthy lifestyle.

Psychoeducation as an adjuvant tool in the therapeutic process

Psychoeducation (PE) or psychoeducational interventions are an efficient alternative to address the specific needs of this group. EP is, from a purely informative conception, an intervention in which a person is provided with information on a given subject; which includes a sender of the relevant content. Given the target group and its problems, the primary objective of PE is to provide information about drugs and their risks, using readings, videos and various materials (Fernández-Castillo et al., n.d.). On the other hand, PE is permeable to different methods that are susceptible to be used in pursuit of the achievement of the originally proposed objectives; that is, it allows the systemic integration of different elements, techniques and tools (Fernández-Castillo et al., n. d.; Losada and Chica, 2017). The use of PE as a method of addressing substance use among youth has examples of its usefulness and effectiveness. The University of Minnesota conducted the Alcohol & College Life program, focused on providing individual prevention strategies to optimize the safety of college campus students. According to the statistics, it has been demonstrated that, among those students who completed the course
evaluation, 97% developed a process of self-awareness regarding the contents addressed. On the other hand, they also reported an increase in learned skills and, consequently, a real change in their behavior (Espinosa, 2020). Regarding the impact of psychoeducational interventions on anxiety and depression, there is a large literature on the benefits in patients with diseases and disorders of various etiologies. In the quasi-experimental study carried out by Sánchez et al. (2014) reported very favorable results in patients with different profiles. Anxiety levels, in a sample of 65 participants, showed a decrease of almost 8 points with respect to the intensity after the psychoeducational intervention. This consisted of, among other elements, the teaching of different relaxation techniques, namely diaphragmatic breathing, Jacobson's progressive relaxation training and Schultz's autogenic training. Casañas (2009), after a psychoeducational intervention (behavior modification, cognitive restructuring and simple relaxation) in a sample of 87 patients, obtained the following results: The Goldberg and HAD scales were used. The mean of the Goldberg scale at baseline and at the end of the group intervention was 11.7213 (SD 4.63369) and 6.196 (SD 5.208) respectively. After comparison of the Goldberg at baseline and at the end of treatment, the Goldberg improved by a mean of 5.525 (SD 4.7944) (Confidence Interval (CI) 4.297-6.753) with this result being statistically relevant (p<0.0001). The mean HAD scale at baseline and at the end of the group intervention was 22.282 (SD 7.304) and 14.347 (SD 7.723) respectively. After comparison, the HAD scale, at baseline and at the end of treatment, improved by a mean of 7.935 (SD 6.357) (CI 6.047-9.823), a statistically significant result (p<0.001). Of the sample of 87 patients, 74 patients showed an improvement in anxiety and depression symptomatology, representing 85% of the total number of interventional patients. Emotional intelligence (EI), as a component of PE, constitutes a factor of protection and well-being; it also facilitates adaptation to the environment, as it provides the capacity for social and personal adjustment (Martins et al., 2010; Perera and DiGiacomo, 2013). EI worked from PE benefits patients or users of a therapeutic program, since, in this way, they are able to understand and express knowledge, abilities, skills and attitudes concerning their emotions (Antonio-Agirre et al., 2017). With respect to PE interventions in groups of people with drug dependence, the intervention carried out by Benito Delegido (2015) showed that in patients with dual pathology (PD) psychoeducation, in the form of brief motivational psychoeducational therapy (BPMT-D), increases motivation to change, as well as knowledge about addictions and PD more than occupational therapy. EP shows its effectiveness in cases of concomitant psychopathology, such as PD. It is precisely in these cases where a parallel approach with the families of the patients or users should be carried out; in this way it is possible to cover all those aspects that are part of the relational dynamics as a whole. In this way, it is possible to: educate family members about the clinical manifestations of the different disorders, etiology, factors that diminish or exacerbate severe symptoms, treatment alternatives, resources, teach a repertoire of coping skills, provide ongoing help to family members, and solve problems of various kinds (Martínez-González, 2012).

Method

Objectives and hypotheses
The general objective of this study is to analyze whether there is a relationship between the proposed psychoeducational intervention and its impact on the quality of life of the users of a therapeutic community. The specific objectives of this research are as follows:

- Address issues such as frustration, guilt, emotional intelligence, and self-esteem, in a workshop format.
- To know the coping strategies employed by users in moments of distress and despair during their stay in the therapeutic community.
• To evaluate the results of the assessment tests used in the constructs of anxiety, depression, personality and self-esteem.

• To analyze if there are differences between the experimental group and the control group in the results of the evaluation tests used.

The hypothesis put forward in this study is that those users selected to form the experimental group will score lower levels of anxiety and depression, and higher levels of self-esteem and personality than users in the control group. Therefore, the objective of this study is the verification of the efficacy and effectiveness of PE in users of a TC for substance addictions.

Participants

The sample consisted of 8 patients with substance addiction problems and PD. All of them participated voluntarily in the present study. The mean age of the sample is 43.50 years; the lowest age was 36 years (two users) and the highest 58 years. All participants are part of the therapeutic community "Casa Oberta" belonging to the foundation "Proyecto Hombre" (Projecte Home Balears), located in the city of Palma de Mallorca.

With respect to the pathologies present in each of the patients, the following is specified: patient 1: unipolar depression, patient 2: borderline personality disorder, patient 3: unipolar depression, patient 4: no disorder specified, patient 5: unipolar depression, patient 6: borderline personality disorder, patient 7: unipolar depression, patient 8: unipolar depression.

To take part in the study, the following inclusion criteria must be met: participants must live in the TC following the internal protocol of coexistence, all of them must belong to the level 2 group (proper nomenclature to designate the most advanced group), they must be of legal age, and accept participation on an absolutely voluntary basis after reading the study information sheet and signing the informed consent if they have the full right; or, on the contrary, their legal guardian. In the latter case, it is also indispensable that the participant accepts voluntary participation.

On the other hand, as exclusion criteria, it is established that those intervening users who do not have the comprehension capacity to complete the evaluation tests cannot, under any circumstances, be part of the sample under study. On the other hand, only users of the therapeutic program "Casa Oberta" who are part of level 2 will be able to participate, excluding level 1.

Design

In the present study, the methodology was framed within a longitudinal quantitative experimental design. The objective of this research was to analyze the effect of a psychoeducational intervention in the experimental group, taking into account the contrast with the control group. Other designs could have been applicable, such as the case study design due to the size of the sample used.

The variables considered are an independent variable (IV), constituted by the PE intervention, and a dependent variable (DV), understood as an evaluation of psychological constructs to study the effect on quality of life.

Variables studied

The variables to be taken into account are: the psychoeducational intervention (VI), and its effect on the experimental group (VD).

The DV is composed of a subset of assessed constructs, namely, self-esteem, depression, anxiety, and personality.
Instruments

Four evaluation instruments were used. Despite the fact that these instruments are quite old, they are standardized and have sufficient reliability and validity to carry out the proposed task. All were explained to the participants. They are specified below.

- **Beck Anxiety Inventory (BAI):** it is a self-applied inventory composed of 21 items. These describe different symptoms of anxiety. Each item is scored from 0 to 3, score 0 corresponds to "not at all", 1 to "mildly, it does not bother me much", 2 to "moderately, it was very unpleasant, but I could stand it" and score 3 to "severely, I could hardly stand it". The total score corresponds to the sum of all items. It has high internal consistency (Cronbach’s alpha from 0.90 to 0.94). The correlation of the items with respect to the total score ranges between 0.30 and 0.71. Regarding validity, this test correlates well with other anxiety measures in different types of populations (Beck et al., 1988).

- **Rosenberg Self-Esteem Scale:** it is one of the most widely used scales to globally evaluate self-esteem. It was originally developed by Rosenberg (1965) for the measurement of self-esteem in adolescents. It includes 10 unique items, which allow you to delve into feelings of self-respect and self-acceptance. Half of the items are stated positively and the other half negatively. After undergoing some improvements, it is now commonly scored in Likert-type format, where items are on a 4-point scale (1= strongly agree, 2= agree, 3= disagree, 4= strongly disagree). In its correction, the scores of the negatively stated items (3, 5, 8, 9, 10) should be inverted and then all the items should be added together. The total score, therefore, ranges from 10 to 40. The scale shows high reliability indices, namely, in test-retest correlations ranging from 0.82 to 0.88, with Cronbach’s alpha in the range of 0.77 to 0.88 (Morris, 1965).

- **Hamilton Depression Scale:** this is a scale designed to provide a measure of the intensity or severity of depression. The Ramos-Brieva and Cordero (1986) version adapted to Spanish and validated the reduced version of 17 items. Its content is mainly focused on the somatic and behavioral aspects of depression, with vegetative, cognitive and anxiety symptoms being the most important in the total scale. Each item is scored from 0 to 2 points in some cases, and from 0 to 4 in others. The total score of the scale is the sum of the scores assigned to each of the items, constituting a score range of 0-52 points. According to the Clinical Practice Guideline produced by NICE, the following cut-off points are recommended: Not depressed (0-7), Mild/Minor depression (8-13), Moderate depression (14-18), Severe depression (19-22), Very severe depression (>23). Regarding its psychometric properties, it has good internal consistency (Cronbach’s alpha between 0.76 and 0.92). The intraclass correlation coefficient is 0.92. Interoobserver reliability ranges from 0.65 to 0.9. Regarding its validity, according to the correlation with other instruments of global assessment of depression, it varies between 0.8 and 0.9.

- **EPQR-A (Eysenck Personality Questionnaire Revised-Abbreviated):** consists of 24 items and 4 subscales: Extraversion, Neuroticism, Psychoticism, and Sincerity. These correspond to 6 items. The response format is Yes (1) vs. No (0), with a range of scores between 0 and 6 for each of the subscales. The first three to be cited assess personality traits, while the last one assesses the tendency to lie; or rather, a tendency to social desirability. High levels of reliability (internal consistency) and convergent and divergent validity have been reported, although it is assumed that the psychoticism subscale presents lower levels of reliability and convergent validity (Sandín et al., 2002).
Procedure

First, having received the pertinent approval and authorization from the Projecte Home Foundation and the Ethics Committee of the University, we proceeded to the selection of users to configure the sample. Those users who met the inclusion criteria were informed about the research and its objectives. They were also informed that the survey would be completely confidential and anonymous; only their age, sex and level of education would be known. They were also given the research information sheet and the informed consent form so that they could sign it if they wished to take part in the study. Since the sample consisted of 8 subjects (subdivided into two subgroups, experimental and control) and the number of women was small, one woman was assigned to each group.

Once the informative documents and consents were signed by the users, they received precise instructions for the completion, first of all, of the evaluation tests used (pre-test phase) during the month of October 2021 in the facilities of Projecte Home Balears in Palma.

Next, four psychoeducational workshops were conducted only for the group of 4 users that made up the experimental group. These workshops, each lasting approximately 80 minutes, addressed topics such as frustration, guilt, self-esteem and emotional intelligence. We always proceeded in the same way: all the users of the group sat in a circle next to the researcher; first, the workshop began with a reading of the topic to be addressed; then, situations in which they felt identified were presented, with the corresponding moods and physical/psychological symptoms, if any; then, techniques to improve their self-knowledge, more appropriate coping styles (EA), and to restructure erroneous conceptual nodes and dysfunctional ideas (REC); and finally, a brief relaxation technique in diaphragmatic breathing with guided imagination. Each of the four sections lasted 20 minutes, adding up to 80 minutes for each workshop. In the specific case of the emotional intelligence and self-esteem workshops, the second section underwent modifications, focusing in the former on community situations to be put into practice, and in the latter on internal dialogue.

Subsequently, once the experimental group workshops were completed, the tests were administered to all members of the sample, that is, to both the experimental group and the control group.

Results

The data set obtained was analyzed and coded using SPSS V.26.0 software. The data matrix made it possible to compare the scores obtained in the different evaluation tests with the individual characteristics of each user in the sample. Subsequently, we proceeded to study the data with respect to the hypothesis and objectives previously specified.

The aim of this research is to study whether, by means of a psychoeducational intervention, the levels of anxiety and depression -in the first instance-, and the levels of self-esteem and personality traits, experience positive or negative variations depending on the case. In this way, tables were extracted to show the most relevant descriptive data for the research, indicating the mean, standard deviation and variance of the variables (Table 1).

Table 1

<table>
<thead>
<tr>
<th>Descriptive statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of users</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
</tbody>
</table>

(2023) MLSPR, 6(1), 85-104
The number of people taking part in the study, as mentioned above, is 8 (N=8). Considering the age variable, we obtain that the ages of the subjects are between 36 and 58 years old. (M= 43.5; DT= 8.280). Seventy-five percent of the users are men and 25% are women. All the subjects belong to the "Casa Oberta" program of Projecte Home Balears and, in turn, all suffer from some TUS, being circumscribed in the diagnosis to dual pathology. The annexes include tables with the percentages of the selected users based on the study group, sex, age and educational level (Tables 1, 2, 3 and 4). On the other hand, information concerning the different clinical diagnoses of the subjects in the sample is also included (Table 5).

Table 2
Descriptive statistics

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid percentage</th>
<th>Cumulative percentage</th>
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</thead>
<tbody>
<tr>
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<td>12,5</td>
<td>12,5</td>
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<tr>
<td>Media</td>
<td>6</td>
<td>75,0</td>
<td>75,0</td>
<td>87,5</td>
</tr>
<tr>
<td>Superiors</td>
<td>1</td>
<td>12,5</td>
<td>12,5</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Note: Taken from Author (2022)

Table 3
Descriptive statistics

<table>
<thead>
<tr>
<th>Gender of users</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Woman</td>
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<td>25,0</td>
<td>25,0</td>
</tr>
<tr>
<td>Man</td>
<td>6</td>
<td>75,0</td>
<td>75,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Note: Taken from Author (2022)

Table 4
Descriptive statistics

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
</table>

The number of people taking part in the study, as mentioned above, is 8 (N=8). Considering the age variable, we obtain that the ages of the subjects are between 36 and 58 years old. (M= 43.5; DT= 8.280). Seventy-five percent of the users are men and 25% are women. All the subjects belong to the "Casa Oberta" program of Projecte Home Balears and, in turn, all suffer from some TUS, being circumscribed in the diagnosis to dual pathology. The annexes include tables with the percentages of the selected users based on the study group, sex, age and educational level (Tables 1, 2, 3 and 4). On the other hand, information concerning the different clinical diagnoses of the subjects in the sample is also included (Table 5).
Psychoeducational intervention for people with addiction problems in a therapeutic community

<table>
<thead>
<tr>
<th>Valid</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>50,0</td>
<td>50,0</td>
</tr>
<tr>
<td></td>
<td>50,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>100,0</td>
</tr>
</tbody>
</table>

*Note: Taken from Author (2022)*

**Table 5**

Descriptive statistics

<table>
<thead>
<tr>
<th>Clinical diagnosis</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid percentage</th>
<th>Cumulative percentage</th>
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</thead>
<tbody>
<tr>
<td>Valid TLP</td>
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<tr>
<td>Depression</td>
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<td>50,0</td>
<td>50,0</td>
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<tr>
<td>Chronic anxiety</td>
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<td>25,0</td>
<td>25,0</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Taken from Author (2022)*

Subsequently, in order to be able to move forward with the statistical research, it is necessary to know whether it is relevant and possible to perform parametric tests or, on the contrary, non-parametric tests should be used. If parametric tests can be used, the assumptions of normality and homogeneity of variances must be met. The normality assumption is tested by Shapiro-Wilk statistical analysis. This test is used in samples that do not exceed 50 subjects (N<50) and allows us to contrast normality by calculating the sample mean and variance, S2, ordering the observations from smallest to largest.

After analyzing the results obtained in the Shapiro-Wilk test, it is observed that the sample does not follow a normal distribution. In view of this fact, the initial possibility of carrying out a repeated samples analysis of variance (ANOVA) was ruled out. Instead, the Kruskal-Wallis H test was chosen as the appropriate test for a case with these characteristics. This test allows to study, in a non-parametric way, whether a set of data comes from the same population. It is identical to ANOVA, with the data replaced by categories. The Kruskal-Wallis test does not assume normality in the data; however, it does assume, under the null hypothesis, that the data used come from the same distribution.

Regarding the depression construct, evaluated through the Hamilton Depression Scale, it is observed that in the pre-test score for the experimental group the extreme values are between 2 and 4 (moderate and very severe depression, respectively) with a median value of 4 (very severe depression). In the case of the control group, the extreme values are between 0 and 4 (non-existent and very severe depression, respectively). The same information is shown in the form of continuous fields (Figure 1).
In contrast to the aforementioned values, and as a result of the psychoeducational intervention, the values of the post-test score are shown below. The following box plot shows how the extreme values for the experimental group are reduced to 1 and 3 (light/minor and severe depression, respectively), with a median value of 2 (moderate depression). In contrast, the control group evidenced a greater arc for their depression scores: 0 and 4 (no depression and very severe depression respectively). In the form of continuous fields (Figure 2).

**Figure 1:** Depression Scale PreTest Score

With respect to the anxiety construct, evaluated through the BAI (Beck Anxiety Inventory), the scores in the Kruskal-Wallis test reveal a median of 3 (high anxiety) for the experimental group in the pre-test. On the other hand, it is pertinent to note that the lack of the lower whisker in the diagram assumes the same values, i.e., repeated in the Beck anxiety test. In the form of continuous fields (Figure 3).

**Figure 2:** Depression Scale Post-Test Score

With respect to the anxiety construct, evaluated through the BAI (Beck Anxiety Inventory), the scores in the Kruskal-Wallis test reveal a median of 3 (high anxiety) for the experimental group in the pre-test. On the other hand, it is pertinent to note that the lack of the lower whisker in the diagram assumes the same values, i.e., repeated in the Beck anxiety test. In the form of continuous fields (Figure 3).
Psychoeducational intervention for people with addiction problems in a therapeutic community

The following graph, pertaining to the anxiety scores in the post-test, shows how, for the experimental group, the extreme values are between 1 and 2 (low and medium anxiety respectively); with a median of 2 (medium anxiety). Thus, it can be observed that after the psychoeducational intervention, the experimental group manages to reduce both median and extreme values. In the form of continuous fields (Figure 4).

**Figure 3:** Anxiety Inventory PreTest Score

For the self-esteem construct, assessed by means of the Rosenberg Self-Esteem Scale, the graph shown below reveals the scores for the pre-test in both groups (Figure 5). In the case of the experimental group, the extreme values are between 1 and 2 (low and medium self-
esteem) with a median of 2 (medium self-esteem). In the particular case of the control group, the extreme values are between 2 and 3 (medium and high self-esteem), with a median of 2 (medium self-esteem).

**Figure 5**: PreTest Self-Esteem Scale Score

The following graph, corresponding to the post-test of the self-esteem construct (Figure 6). It shows, for the experimental group, extreme values of 2 and 3 (medium and high self-esteem), with a median of 2 (medium self-esteem). In the case of the control group, the extreme values are between 2 and 3 (medium and high self-esteem), with a median of 2 (medium self-esteem).

**Figure 6**: Self-Esteem Scale Post-Test Score

The eight graphs of the personality construct corresponding to the four subscales, measured through the EPQR-A (Eysenck Personality Questionnaire Revised-Abbreviated), in the pre-test and post-test phase, are shown below (Figures 7, 8, 9, 10, 11, 12, 13, and 14) The four subscales, as mentioned above, pertain to "neuroticism", "psychoticism", "extroversion" and "sincerity". Possible values range from 1 to 5 (1 being "very low", 2 "low", 3 "Average", 4
"High" and 5 "Very high"). As can be seen, the observed results show very similar scores in the pre-test and post-test phase for both groups. Both the extreme values and the medians occupy very similar positions in all the personality subscales that make up the EPQR-A.

![Figure 7: PreTest Psychoticism Score](image1)

![Figure 8: PreTest Extroversion Score](image2)
Figure 9: PreTest score in Neuroticism

Figure 10: PreTest Sincerity Score
Psychoeducational intervention for people with addiction problems in a therapeutic community

Figure 11: PostTest score in Psychoticism

Figure 12: PostTest Extroversion Score
Discussion and conclusions

In accordance with the initial objectives, we analyzed whether statistically significant differences were found with respect to the constructs of anxiety, depression, self-esteem and personality, taking into account the PE intervention carried out in the control and experimental groups. The results reveal that, except for the constructs of self-esteem and personality, PE is effective in reducing the levels of anxiety and depression in TC users with PD; the results are statistically significant. It should be noted that all participants in the sample belong to the same TC and the same therapeutic program.

The hypothesis initially put forward was that, after a psychoeducational intervention in a program for users with PD, users would report changes in the constructs studied; the personality construct being a predictor of previous traits at the same time. This hypothesis is
partially rejected, since statistically significant differences were only found for the depression and anxiety constructs.

The non-plausibility of acceptance of the initial hypothesis for these two constructs can be explained by several reasons. First, different theoretical currents postulate that personality is a construct that is not as permeable to change as others. Personality is composed of multiple components and is built during childhood and adolescence. This is why, given the behavioral changes of the users during their stay in the community, the personality is practically fixed and immovable for practically all users. Personality theory holds that the interaction between cognition, learning and environment shapes personality; adding the internal expectations of the subjects (Sinisterra et al., n.d.).

With respect to self-esteem, it could be inferred that, since it is an eminently cognitive construct, it did not show statistically significant enough changes to be taken into account. The evaluation that a person consciously makes of him/herself depends on various psychological components; this is why, in the case of users with PD and, for the most part, with several relapses in substance use, the evaluation of self-esteem tends to be negative on a regular basis and shows little change. In a study carried out in Argentina by Cattan (2005) it was found that self-esteem, for the two groups of young people who participated in the study, maintained low and between low and normal levels with respect to social skills. The hypothesis that self-esteem did not show significant differences between the admission stage and the social reintegration stage was corroborated.

With respect to the anxiety construct, it is deduced that the teaching of relaxation techniques such as Jacobson (brief) or diaphragmatic breathing, not only benefits the reduction of anxiety levels during the workshop, but also the quality of life of the users from that moment onwards. The levels of anxiety reported in the experimental group indicate a significant decrease after the psychoeducational intervention; the four users who made up this group started from a severe level of anxiety, and after the intervention three of them decreased to a moderate level of depression and one to a mild level. This may be due to the understanding and subsequent assimilation of concepts inherent to anxiety, as well as to the users' application of the relaxation techniques taught. Relaxation, given its applicability in terms of practical exercises for the daily life of the users, seems to be useful in times of need for them: difficult moments of their own coexistence in the community, arguments or disputes between users, changes in medication prescribed by the medical team, etc.

Depression levels, on the other hand, showed a decrease after the psychoeducational intervention in the experimental group for some users. Of the four users who made up this group, one dropped from "very severe" to "severe depression", and another from "very severe" to "moderate". Based on the sample size, it is pertinent to underline the decreasing effect on depression levels. There are studies in the scientific literature which highlight the efficacy of PE for cases of depression, being this more approachable when symptoms are milder; but, in any case, effective, even taking into account this variability depending on the severity of the symptomatic picture (Casañas et al., 2014).

The size of the sample (eight subjects) is a limitation of the study, as it does not achieve a more significant sample size in terms of greater representativeness of the diversity of users. The justification for the relevance of this study was to have as many users as possible in order to be able to carry out the intervention with people with PD. The rest of the non-participating users and members of the therapeutic community declined the proposal to participate, mostly due to medical considerations or fragile emotional state. Another of the reasons for the relevance of the intervention carried out, and in line with the above, is precisely the fact that the sample includes subjects with PD and the fact that they live together in a TC; that is, although the sample is small, it has added value by incorporating more variables, which makes it more enriching for the researcher's own work.
Another limitation of the sample is the fact that the selected sample, as well as the group of users living in the TC, do not lead a structured life (housing, work, healthy interpersonal relationships, etc.), which has an impact on the reported levels of the four constructs studied in this study. It is also worth noting the variety of diagnoses present in the participants. In this sense, the sample is not very representative of each disorder; this is why the variable “diagnosis” only shows the amalgam of disorders present in a TC focused on the treatment of users with PD. In view of this fact, it is proposed, as future lines of research, to carry out another study with a larger sample, in order to be more representative and precise in establishing causal relationships between the various disorders and their mediation in the reported values of self-esteem, depression, personality and anxiety. On the other hand, it is also suggested to carry out another study in which, based on people with PD who are not in any TC program, the possible influence of not being in a community is taken into account. Some foundations for people with addiction problems have programs for those individuals with more structure, logistics and support; we suggest the possibility of conducting another research on programs of this nature and, in this way, to be able to compare results between therapeutic community and external programs. On the other hand, it is proposed to carry out a study of longer duration and with more psychoeducational components in the form of workshops, so that the possible correlation between intervention time in PE and results in evaluation tests can be verified.

In relation to possible variables that could have an influence, and as a limitation when it comes to accurately recording the different constructs measured by the users, it should be noted that the possible cognitive deterioration that could occur in some participating users is not taken into account. As a future line of research, the assessment of cognitive impairment is proposed as a prerequisite for similar investigations of the effectiveness of PE in therapeutic communities.

In consideration of the possible implications of this study, it is worth mentioning the contribution in the field of community and social addictions. On the one hand, it is a contribution to the theoretical substratum that underlies the praxis of similar psychoeducational interventions. It is a contribution to the therapeutic community itself, understood as a concept attached to the rehabilitation and reintegration of people with these problems. The communities need those therapeutic procedures that really serve and are useful for the users; therefore, on-site research contributes to the improvement in the way therapy is conceptualized and carried out, or to complement it. On the other hand, at a social level, the implementation of studies that contribute to and attempt to influence the quality of life of drug addicts benefits society as a whole.

**Conclusion**

People with addiction problems that are accompanied by dual pathology regularly manifest various behavioral and emotional problems. The consequences derived from years of consumption and maladapted life, revert in successive disorders and disorders. For their part, therapeutic communities are, in many cases, an alternative for people without resources and with addictions to different substances, whether they are on PD or not.

After the study of the data obtained, it is observed that, after the application of the psychoeducational intervention in the form of workshops, some users of Casa Oberta who formed the experimental group improved statistically significantly in anxiety and depression. Therefore, from these data it is concluded that psychoeducational therapeutic work is, in this sense, positive for people with PD and significant levels of anxiety and depression.

The self-esteem construct remained stable for the experimental group and variable for the control group. Therefore, the intervention in EP did not obtain statistically significant positive results.
Personality, on the other hand, showed no relevant changes in the sample under study. It is concluded that the personality construct tends to remain practically unchanged over time and that the psychoeducational intervention did not lead to statistically significant changes in the sample.

Last but not least, it is important to highlight the need for existing TCs in our country to have a greater number of clinical or general health psychologists. For, in spite of drawing from other academic disciplines (social work, pedagogy, labor counseling, etc.), the work developed around group or individual therapy must be carried out by professionals specialized in that field and concerned for that purpose.

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