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AFASES 2013
Brasov, 23-25 May 2013

THE EVALUATION OF PSYCHOSOCIAL RELATIONS IN NEUROPSYCHIATRIC REHABILITATION CENTERS

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Summary: The specialized researches in the field of social psychology have demonstrated the importance of relating the individual to his affiliation group as a condition for an optimal social integration. Based on these results, we have found that the best predictor for the social integration of the mentally ill institutionalized persons is given by the relationship that he/she built with other ill patients integrated into the center, along with concrete ways of maintain the friendship relations. For the investigation, we aimed to evaluate the way they relate with others patients using sociometric test of personality. Taking into consideration the psychosocial uniqueness of the group, the cohesion is a sign of overall behavior improvement. We wanted not only to determine, to investigate and to observe the patients in their environment but also to develop some actions in order to improve the human condition in institutions. The benefits provided by the sociometric test helped us to propose to organize the patients in a new way in occupational therapy and in the rehabilitation center rooms (based on their preferences). We have considered that according to the relationships that they have (based on sympathy and antipathy), the therapeutic groups can become more stabile if the patients share their personal space (the room).

Key words: beneficiary, rehabilitation center, interpersonal relationship, interaction, cohesion.

1. INTRODUCTION

In order to know the motivation of the preferences/rejections and certain variables of individual and group personality we have developed two instruments. The first instrument was made to investigate the motivation of the beneficiaries and it pursed their skills of answering to questions with profound reverberation for their psyche. They were asked to reflect, to introspect and to analyze the inter-affective, intercommunication and inter-cognitive relations. The first instrument is a questionnaire based upon sociometric test of Holban I, sheet A, and include 7 themes, which allow, pointing the preferences and dislikes with their motivations, a information regarding the features of the analyzed group even: friendship relations; level of solicitude; prestige of personality; the principles and discernment; attitude toward work; ability to organize; capacity to influence.

It is considered that these variables represent the main way of the individual manifestation in the group and that they express the synthetic value of the personality in terms of their psychosocial characteristics. The instrument was applied to 100 beneficiaries.

The above described instrument was a first step in sociometric investigation in order to involve the beneficiaries and knowing the motivations of all type of conducts, interactions and human relationships.

We have developed a second sociometric instrument consist of one simple item and a dual preference item for the purpose of knowing the preferences and the motivations of the beneficiaries regarding the choices made by the therapy colleagues or by

the roommates. The purpose of this tool is the optimal psychosocial integration in the rehabilitation center collectivity and then to reintegrate into society.

2. THE DEFINITION OF THE CONCEPTS

The beneficiaries represent a category of chronic somatic or/and mental ill patients, which taking treatments in community have not obtained a significant recovery and as a result they lost their autonomy by chronic disease and the beginning of mental and psychological disability.

The psychosocial phenomenon is a key concept from which all others arise. The beginning of the mixed, dual, binary phenomenon is based on two supports: psychological and social. In the social life there is no mental phenomenon which work isolated from those social and vice versa.

The interaction is one of the key concepts of the social psychology and it indicate phenomena that occurs not only within the psyche but also outside of it, in the miniature world of matter micro-particles as that of galaxies and meta-galaxies populating the universe (P. Golu, 1989).

The interaction is the process of the fundamental, active, mutual dependence of the individuals; the behavior of one individual are reflected in the behaviors of others (P. Golu, 1981).

Interpersonal relationship is an important concept in social psychology and it is a mixed, psychosocial relationship. It represent a direct and conscious psychic union, based on a complex, reverse link, this union include at least two people (P. Golu, 1974).

The cohesion can be considered the most important group variable because of it the group exist and operate as a coherent entity relatively self-content (P. Golu, 1971).

3. RESEARCH METHODOLOGY

3.1 RESEARCH OBJECTIVES

• Identify the conditions that can favor harmonious interpersonal relationships and creating a sanogenetic social climate close to that of a normal home for psychological recovery and rebalancing of the beneficiaries.

• Investigation of psychosocial factors which facilitate discharge and the reintegration in the social and home environment.

3.2 RESEARCH HYPOTHESIS

We estimate that the evaluation of psychosocial relations between the patients in the rehabilitation center allow us to express an accurate prognosis of the patient's successful reintegration in the society.

3.3 RESEARCH SUBJECTS

The lot of research consists of 100 beneficiaries.

3.4 RESEARCH TOOLS

3.4.1. The questionnaire adapted from sociometric personality test Holban I.

3.4.2. The questionnaire for beneficiaries consisting of a simple item and a dual preference item.

3.5 RESEARCH RESULTS

3.5.1 Sociometric test adapted from sociometric personality test Holban was made on the basis of similarity of the diseases suffered by patients, as follows:

- The first group consisted of those suffering of neuropsychiatric disease and it was composed of 50 members.

- The second group was composed of people with mild or severe mental disabilities and it was composed of 26 members.

- The third group was composed of 19 persons with neurological affection or involved in the center as social cases.

- The last group (5 persons) consisted of patients suffering other diseases.

The responses of the beneficiaries have been converted according to the liked characteristics of the colleagues and I placed them in seven qualitative grids: communication, cognitive abilities, emotional and instrumental support, social behavior, activity, similarity in statute, psycho-moral values, according to the table 3.5.1.

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	The motivation of the preferences	The motivation of the rejection
Communication	He/she is an opened person, talk nice, we have the same discussion subjects, good listener	Not speaking, does not agree with me, doesn't listen me
Cognitive abilities	He/she is intelligent, smart, understand what I say	Don't understand what I say, is stupid, he/she don't know
Emotional and instrumental support	He/she help me loves me, cares me, understand me, is merciful	He/she don't care about the others, don't help me when I need
Social behavior	He/she behave nice, respectful, good, educated, disciplined, calm, friendly	He/she is unruly, beat the others, swear, stole, don't know how to behave
Activity	Skillfully, dynamic, lead the job done, have volition, diligent, has talent, good organizer	Lazy, not taking part to activities, he/she don't know to do something
Similarity in status	We are suffering colleagues, room mates	He/she is also sick as I am, he/she is more sick than I am
Psycho-moral values	He/she is honest, fair, vigilante, is reliable	Trickery, not accept me, not reliable, liar, coward

Table 3.5.1 The motivation of the preferences and of the rejection

The results expressed in percentage are found in the following figure:
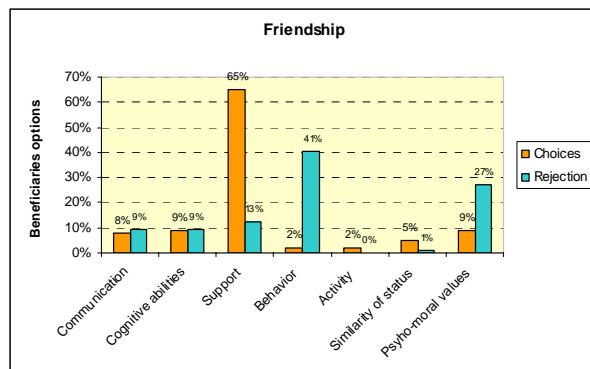

Figure 3.5.2 Friendship variable

At friendship variable 65% of beneficiaries have reasoned their preferences according to the given support. We specify that the high percentage at support category signifies a positive valorization of those beneficiaries that have the qualities and the resources that helped the beneficiaries who preferred them.
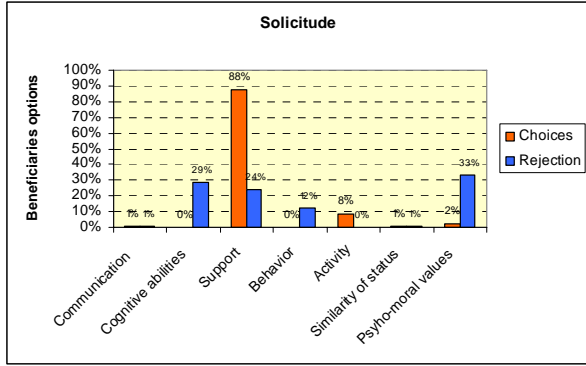
Figure 3.5.3 Solicitude variable

At solicitude variable, 88% of beneficiaries have preferred those colleagues who are able to offer their support in difficult situations. The motivation of their preferences expresses their need to get help and we specify that this need is one of the most intense and if it is impressive is because it is not satisfied in specific institutional environment.
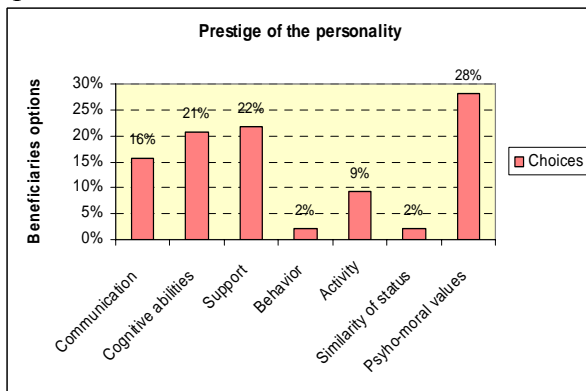

Figure 3.5.4 The prestige of the personality variable

At prestige of the personality variable we observe a relatively close dispersion of the preferences: 28% of beneficiaries with psycho-moral qualities are preferred, 22% of beneficiaries that offer support, 21% of beneficiaries with high cognitive abilities and 16% of beneficiaries that can communicate with. We consider that the choices of the beneficiaries were motivated by their need to succeed with those colleagues who are already well-liked and recognized by others.
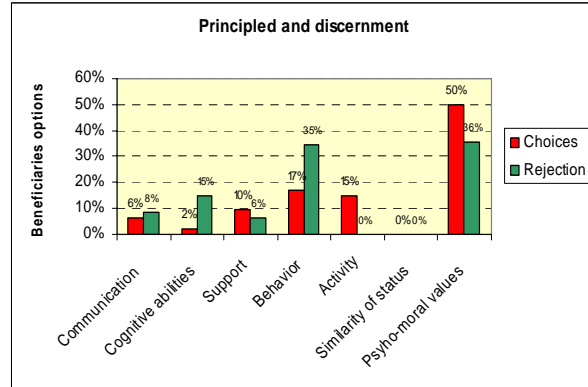

Figure 3.5.5 Principled and discernment

At principled and discernment variable they were preferred 50% of beneficiaries with psycho-moral virtue which have been characterized as vigilante and lovers of truth.
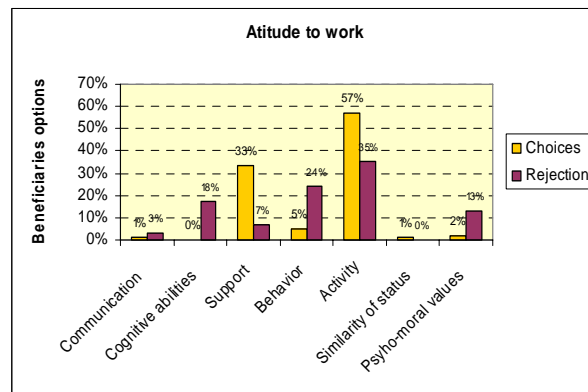

Figure 3.5.6 Attitude to work

At activity variable were preferred 57% of beneficiaries who have skills, who are active, they made appreciated products and they finish their work and 33% of those who are able to offer their help to the people who ask this. Join with recognized beneficiaries could change their social status by learning and improving work skills and the prestige.

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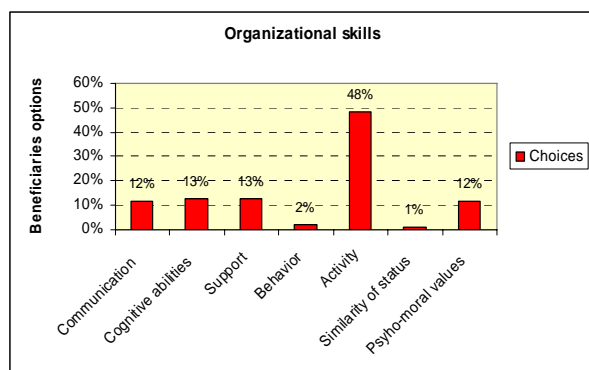AFASES 2013
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Figure 3.5.7 Organizational skills

Figure 3.5.9 Total of preferences-rejections

At organizational variable, 48% of beneficiaries have preferred those generally active, with organizational skills, with team spirit and capacity of resolution.
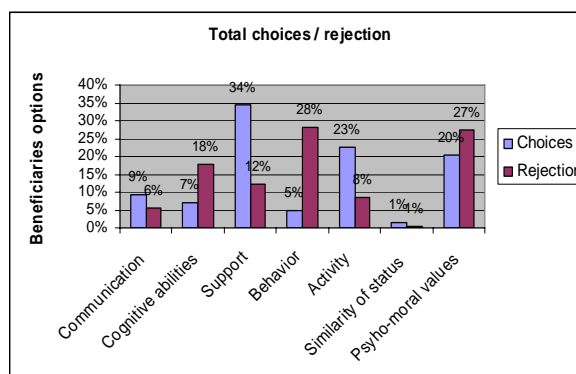

Figure 3.5.8 Capacity to influence

At influencing capacity were preferred 42% of beneficiaries possessing psych-moral values and 22% of those with communication skills, we specify that those qualities represent in their point of view an important advantage that could mobilize the group. 19% of those who are diligent and active were elected.

Deepening knowledge of the group, we were interested in knowing the dominant of the group personality calculating the overall weighting of preferences and rejections of the analyzed group according to each variable. The support represents the main dominant of group personality in preferences of the beneficiaries with 34%, followed by attitude to work with 23% and by psycho-moral values with 20%. We have to note that the similarity of the statute was 99% ignored, the explanation being that the beneficiaries avoid motivating their preferences in terms of similarity of the status because of the moral pain of being institutionalized and acting this role. Based on our observation along ten years of work and research as well as based on the analyzed questionnaire, it result that beneficiaries have as a base for their relationships their need that must be fulfilled by the others beneficiaries, friends or family, such as: the need of affection, the support, the activity, psycho-moral values, communication, the desire to be heard and understood.
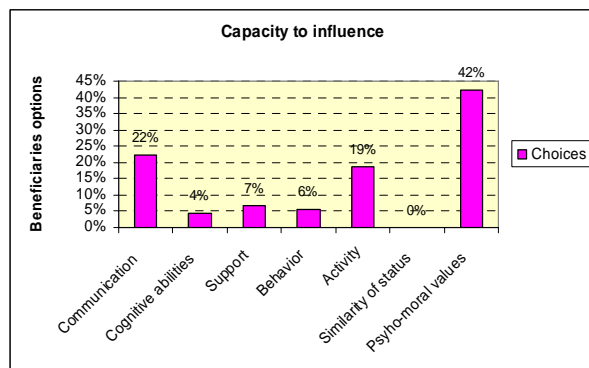
Proposals for improvement

• The intensification of interpersonal relation between beneficiaries – beneficiaries, beneficiaries – employees, beneficiaries – family.

• Equip the institution with material resources in order to organize occupational therapy activities and ergo-therapy that would have the effect of stimulating the interpersonal relations and rebalancing.

• A qualified personnel to coordinate the activity of beneficiaries is an aim which increases beneficiaries' self-esteem by activity.

3.5.2. The second sociometric instrument was applied on a lot of 35 beneficiaries that we have selected using multistage random sampling, sample from 100 beneficiaries, initially investigated. The results of the second instrument, at the first item "Which of the therapy colleagues are your best friends?" are contained in socio-matrix where we have recorded the preferences of beneficiaries, index status and rank (M. Zlate, C. Zlate, 1982). We made the collective sociograma "target" 3.5.11 based on sociometric status index in the table 3.5.10.

Number of preferences	Number of subjects with the same number of preferences	Iss	Rank	Preferential psychosocial value
9	1	0.26	1.00	Charismatic
7	1	0.21	2.00	
5	2	0.15	3.50	Accepted
4	1	0.12	5.00	
3	4	0.09	7.50	
2	10	0.06	14.50	
1	8	0.03	23.50	
0	8	0.00	31.50	Cold

Table 3.5.10 Repartition of group members according to sociometric status index
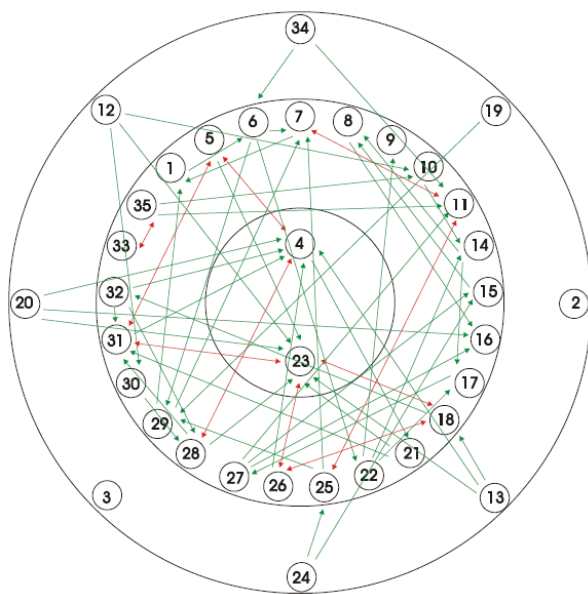
Sociogram 3.5.11 Item 1 preferences (Which of the therapy colleagues are your best friends?)

Legend

←——→ **mutual preferences**

——→ **unilateral preferences**

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At the first item of the second instrument there are two charismatic subjects that are included in the first inner circle of group sociogram. The subject number 23 was the most favorite being situated in the first place. This beneficiary is the most appreciated member of the investigated group totaling a score of 16 points. He has medium education and he distinguished over the years by participation in psychotherapy activities being motivated for self-knowledge and for discovers his skills. With our guidance, the beneficiary has discovered his abilities for picture and drawing attending the art-therapy room. His activity was sustained by motivation and will, also he has strengthened social rules and values so today he is psycho-somatically recovered. And if he is not yet reinstated is due to the lack of family support. During the occupational therapy I gave him some tasks and he succeed to coordinate the activity of others beneficiaries when the situation demanded it. He enjoys the appreciation and the respect from both beneficiaries and employers of the institution.

The subject number 4 gathered 15 points which placed him on the second position. He was preferred by his colleagues for his socio-human qualities. He has university studies, he respects the social rules, he is divorced and he misses the support for a socio-familial reintegration. Both beneficiaries are diagnosed with schizophrenia and the reality of sociogram is the same with the reality in the institution, the two beneficiaries are the most appreciated in the group.

There are 25 members in "accepted" category; generally they are eager to socialize expressing their preferences. They are part of the second circle. At this level, there are ten mutual appreciations which lead us to consider that dyads are the most common way to express closer interpersonal relation which does not allow the other beneficiaries in their space. We can also note a triad interpersonal relationship, consisting of the subjects number 26, 23 and 18. The subjects number 2 and 3 didn't express and didn't receive any preference. Their social expansion doesn't exist. Indeed, these beneficiaries have serious integration problems in the institution. They are often offended because of the restrictive freedom; they suffer very much because of the lack of family support and losing their socio-professional status.

A number of 8 beneficiaries have no preferences and they are assigned to the third circle; they are in the category of cold or isolated beneficiaries and they are in a way at the periphery of sympathetic-affective relations and without any value in their function.

The motivation of the expressed preferences was based on the appreciation of the: social support 40%, global behavior - 37%, communication - 20%.

We further analyze the second item "Which of your therapy colleagues you would like to be/or not to be in the same room?" For this, we made the sociomatrix, we have calculated the amount of the preferences, amount of the rejections, the index of a preferential status of a member and the rank (M. Zlate, C. Zlate, 1982). In order to

determine the nature of the relationships between the members of the group, it was necessary to draw up the collective sociogram "free" of the group 3.5.13. The most widespread form of graphical presentation is the sociogram so-called "target" based on several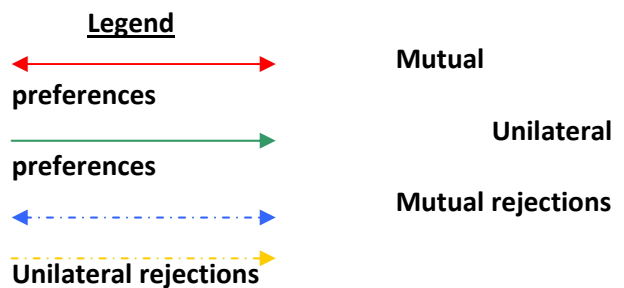 concentric circles containing within the group members, we have prepared the table below where we divided the group members according to their index preferential status. Based on the given data in the table 3.5.12, we concluded that we need four concentric circles.

The number of preferences	Number of subjects with the same number of preferences	Isp	Rank	Preferential psychosocial value
7	2	0.21	1.50	Charismatic
6	1	0.18	3.00	Accepted
4	1	0.12	4.00	
2	6	0.06	7.50	
1	5	0.03	13.00	
0	4	0.00	17.50	Cold
-1	6	-0.03	22.50	Rejected
-2	4	-0.06	27.50	
-3	2	-0.09	30.50	
-4	4	-0.12	33.50	

Table 3.5.12 Repartition of group members according to preferential status index.
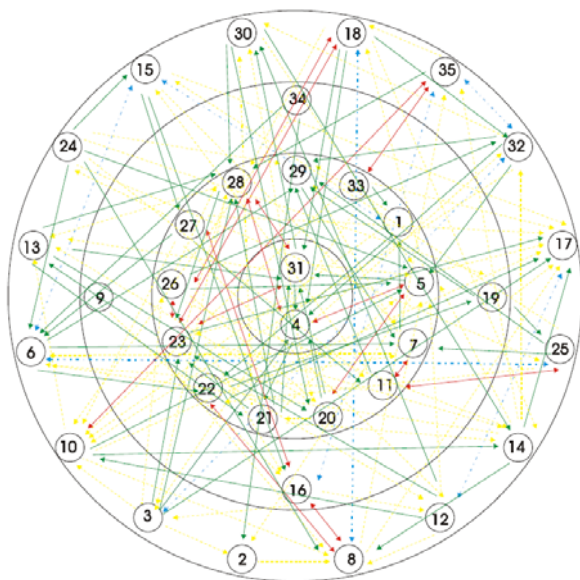
Sociogram 3.5.13 Preferences/Rejections item 2a and 2b (Which of your therapy colleagues you would like to be/or not to be in the same room?)

Legend

← preferences → **Mutual preferences**

→ **Unilateral preferences**

Mutual rejections

Unilateral rejections

Thus, the first circle will contain charismatic subjects; the second circle will contain accepted subjects; the third circle will contain the cool subjects and the fourth circle will contain rejected subjects. Forward we will highlight some aspects related to the preferential structure of the group.

There are two subjects in "charismatic" category, 31 and 4, who obtained only positive values. This suggest us the idea that the two subjects are recognized leaders of the group. They are appreciated for their balance in relations with the others and for their solicitude in the group.

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As we can see both in sociogram and in sociomatrix the subject number 4 is the informal leader of the research group at the first item and at the second item. The subjects number 23 and 31 have a close preferential status index and they are placed on the second and on the third place in the expressed preferences; both 4 and 31 subjects have only positive preferences while subject number 23 have a contradictory relationship with the subject number 5 because of the struggle for position in group (incompatible pair). Although the subject number 23 is the informal leader of the group, as a result of the research the informal leader is not the same with the formal leader.

Linking this information with those from the psycho-social observation in the center along the years, we note a similarity between the results obtained with this two methods.

In "accepted" category we find 13 subjects, while in "cold" category we find 4 subjects.

We have to remark that the subject number 9 is typically cold subject, he didn't express any preference only one rejection. The subjects number 16 and 19 have 0 index of status because of the cancelation of values.

We find 16 members in "rejected" category which is a high number compared to the study group. This is an explanation of the poor cohesion of the group as we will find in the index cohesion group calculation. The sociometric analyze reveal us some interesting aspects:
• there are a total of 15 subjects with positive preferential status, 16 subjects with negative preferential status and 4 subjects with

null (zero) status, which highlights the precarious situation in which is not only the subjects but the whole group;
• purely quantitative global analysis reveal us that there were 94 of preferences and 89 of rejections, so a total of 183 choices. Among them, there are 78 of unilateral preferences and 16 of mutual preferences, 81 of unilateral rejections and 8 of mutual rejections and 10 contradictions.

The inventory of the number of preferences and rejections in group is significant in the direction of providing information regarding the level of involvement of subjects in sociometric network. Also, some authors believe that the more homogenous is the distribution of preferences and rejections the greater is cohesion degree and integration of the group.

The number of the preferences in group represents valuable information in the calculation of the group cohesion index.

Sociometric index calculation (F. Sintion, 1983):

a) Calculating the limits of the positive socio-preferential intensity

Median $M = \Sigma Pv / n$, where M –median, PV –expressed preferences, n –number of members

In our case, $Pv = 363$, $n = 35$

In our case, $M = 363 / 35$, $M = 10$

Limits:

$M < 9$, inferior limit $Li = M - 3$

superior limit $Ls = M + 3$

$M > 9$ inferior limit $Li = M - 4$, our case=6

superior limit $Ls = M + 4$, our case = 14

Limits calculated on the basis of preferences expressed allow determining the

type of social expansiveness specific to each group member:

The value of preferences expressed by a certain member of the group (Pv)	Type of social expansiveness	Our case (number of subjects)
Pv ≥ Ls	Superior social expansiveness	7
Ls > Pv > Li	Average social expansiveness	23
Pv ≤ Li	Inferior social expansiveness	5
Maximum 2 expressed preferences	Solitary	13

Table 3.5.14 The way to determine the type of social expansiveness

Limits calculated on the basis of preferences received allow to determining the type of social integration specific to each member of the group:

The value of preferences received by a certain member of the group (Pv)	Type of social integration	Our case (number of subjects)
Pv ≥ Ls	Superior integrate type	10
Ls > Pv > Li	Average integrate type	13
Pv ≤ Li	Inferior integrate type	7
Receive no preference	Isolated (non-integrated)	5

Table 3.5.15 The way to determine the type of social integration.

b) Calculating the limits of the negative socio-preferential intensity is based on the rejections received:
Median $M = \Sigma Pv / n$, where M –median, RV – received rejections, n –number of members
Our case, Rv = 347, n = 35
Our case, $M = 347 / 35$, M = 10
Limits:

M < 9, inferior limit $Li = M - 3$
superior limit $Ls = M + 3$
M > 9 inferior limit, $Li = M - 4$, our case = 6
superior limit $Ls = M + 4$, our case = 14
Limits calculated based on rejections received allow us to determine the typology of non-integrated.

The value of rejections received by a certain member of the group (Rv)	Type of social non- integration	Our case (number of subjects)
Don't receive any preference	Isolated type	6
Rv ≤ Li	Ignored type	9
Li < Rv < Ls	Rejected type	9
Rv ≥ Ls	Outcast type	11

Table 3.5.16 The way of determine the type of social non-integration

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Calculation the group cohesion (F. Sintion, 1983)

In this step of processing the sociometric test group cohesion is calculated based on the intensity of the preferential relations, according to the formula:

$$CCG = [(Px \times 0,5 + Py \times 1 + Pz \times 1,5) - (Rx \times 0,5 + Ry \times 1 + Rz \times 1,5)] / N$$

Px – number of subjects preferred at inferior limit of intensity

Py – number of subjects preferred at average limit of intensity

Pz – number of subjects preferred at superior limit of intensity

R – received rejections at the same limit of the intensity like P

N – total number of subjects

Substituting the facts with the values in the tables 6.6.4 and 6.6.5, it follows:

Coefficient of group cohesion CCG = 0,04

The significance of CCG can have values between -1 and +1, according the standard by N.C Matei (quoting in P. Muresan, 1980):

Nr.crt.	Value CCG	Type of group
1	-1 to -0,70	Dissociated group
2	-0,69 to -0,40	Group with explosive relationships
3	-0,39 to -0,20	Group with dissentions
4	-0,19 to -0,01	Group at the beginning of decay
5	CCG = 0	Group with contradictory forces
6	0,01 to 0,20	Group with poor cohesion
7	0,21 to 0,40	Group at the start of cohesion
8	0,41 to 0,60	Group with moderate cohesion
9	0,61 to 0,80	Group with significant cohesion
10	0,81 to 1	Group with significant high cohesion (perfectly cohesive group)

In conclusion, the groups that we have investigated have a poor cohesion coefficient, which enable us to appreciate that in a psycho-social area the members of the group have certain unity.

Another formula often used for calculating CCG is that determined by Proctor and Loomis (quoting Zlate M., 1982) based on the number of the positive pairs in the group:

$CCG = C / [N(N-1)/2]$, where C is the number of the mutual choices and N the number of the members of the group. In our group N=35 and there are 16 pair of positive preferences.

So, CCG = 0,03, poor cohesive group.

As shown, using the both calculation methods we have achieved relatively similar coefficients cohesion.

4. RESEARCH CONCLUSIONS

Hypothesis: **We estimate that the evaluation of psychosocial relations between the patients in the rehabilitation center allow us to express an accurate**

prognosis of the patient's successful reintegration in the society, has been confirmed.

We consider that the initially determined objectives had been achieved.

Sociometric investigation data showed that, psychologically, you cannot established a social reintegration program for beneficiary, in the absence of a relationship with the others beneficiaries in the center.

During our activity, the number of the interpersonal dyads increased. There where an increase of the cooperation between beneficiaries and of the group solidarity in the same time with the decline of the effects of social devaluate behaviors that they have presented before starting the psychotherapy.

Territoriality has an important role, the beneficiaries interact more with the group therapy colleagues and with the room/area mate.

The beneficiaries have expressed their wish to interact with healthy, tonic and agreeable people, which can represent a model, rejected the idea of spending the time only with the others beneficiaries.

As it is known, interpersonal relationship contains the germ of collective inter-psychology it being the smallest group possible.

If at the beginning of the research the group had a lot of dissensions, now the group has a poor cohesion and this indicate some changes in personal and interpersonal structure of the beneficiaries, this situation confirm the hypothesis that psychotherapeutic activity contributed to a relative inter-relation group homogeneity.

Given the psycho-social uniqueness of the group, the cohesion is an indicator of improving for global behavior. Group cohesion calculated at sociometric test CCG=0,04 (poor cohesion), compared with the absence of the cohesion at the beginning of the research, represent an indicator of improvement for global behavior and it is a condition for psycho-social reintegration of beneficiaries in neuropsychiatric rehabilitation and recovery centers.

Proposals

• Is recommended that patients to be placed in rooms according with their affections;

• Settlement planning in the rooms has to be done taking into consideration their affinities;

• The caring and the arrangement of the personal space has to be done based on the needs and the wishes expressed by beneficiaries;

• It is preferred like informal interaction between patients with mental illness at the same level of severity to be encouraged;

• The formal leaders of the group patients must be the persons who made progress in recuperative process.

5.BIBLIOGRAFIE

1. Golu, P., Fundamentals of social psychology, Ed Ex Ponto, Constanta, 2000
2. Golu, P., Psychology of social groups, Ed Miron, Bucharest, 2004
3. Golu, P., Social Psychology, Didactic and Pedagogic Publishing House, Bucharest, 1974
4. Sarbu, A., Branzei, P., Psychiatry, Didactic and Pedagogic Publishing House, Bucharest, 1981
5. Sintion F., Practical Applications of Psychology Military, Military Publishing House, 1983
6. Muresan, P., Social learning, Albatros Publishing House, Bucharest, 1980.

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