Comparison of the Social Atoms of Psychotic, Neurotic and Normals and devoloping Social Atom Test (SAT)

Comparación de los átomos sociales de personas psicóticas, neuróticas y normales y desarrollo del Test del Átomo Social (TAS)

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Abstract

J.L. Moreno brought an innovative and revolutionary perspective to religion, philosophy, psychology, psychiatry, sociology, education, art and theatre. Moreno's personality theory is considered as a biosocial interaction theory: a theory postulating that human beings have developed functions through constant interaction between the biological organism and the social environment. (Bischof,L.J. 1964)

This article presents a research unter the name of the "Comparison of the Social Atoms of Psychotic, Neurotic and Normals" in a psychiaty clinic of a military hospital and obtained statistically significant results data is already plural. The social atom test developed for this purpose was applied to individuals considered as normals , individuals with various neurotic diagnoses and individuals with psychotic states. In this study the differences among the "social atoms" of individuals in psychotic, neurotic and normal groups are analyzed. In order to determine the differences, eight research hypotheses were tested. All hypotheses have been tested at an error level of 0.05.

Resumen

J.L. Moreno aportó una perspectiva innovadora y revolucionaria a la religión, la filosofía, la psicología, la psiquiatría, la sociología, la educación, el arte y el teatro. La teoría de la personalidad de Moreno se considera una teoría de interacción biosocial: una teoría que postula que los seres humanos han desarrollado funciones a través de la interacción constante entre el organismo biológico y el entorno social (Bischof, L.J.1964).

Este artículo presenta una investigación bajo el nombre de "Comparación de los átomos sociales de personas psicóticas, neuróticas y normales", llevada a cabo en una clínica de psiquiatría de un hospital militar y con numerosos resultados estadísticamente significativos. La prueba del átomo social desarrollada para este propósito se aplicó a individuos considerados normales, a individuos con varios diagnósticos neuróticos y a individuos con estados psicóticos. En este estudio se analizan las diferencias entre los "átomos sociales" de los individuos de los grupos psicóticos, neuróticos y normales. Para determinar las diferencias, se probaron ocho hipótesis de investigación. Todas las hipótesis se han probado con un nivel de error de 0.05.

Moreno, one of the most important theoreticians and revolutionaries of the contemporary era, is the creator of a large system that can contain the individual and the whole society together, and this system is called the "Psychodrama Group Psychotherapy and Sociometry". Numerous concepts in this system provide very important awareness to understand people and one of them is the concept of "Social Atom", which explains and examines their relationships. In relationships we grow and become ill. This is our social placenta, in which we experience all kinds of reality. Therefore, our social atoms have a very important place in both diagnosis and treatment. According to Lung's article "Stressful Social Relations and Mortality" in which the association between stressful social relations (with partner, children, other family members, friends and neighbors, respectively) and mortality is evaluated among middle-aged men and women in a large population-based study, stressful social relations are associated with increased mortality risk among middle-aged men and women for a variety of different social roles. Those outside the labour force and men seem especially vulnerable to exposure. (Lund, R. 2014)

The social atom is the nucleus of all individuals towards whom a person is emotionally related or who are related to them at the same time. It is the smallest nucleus of an emotionally toned inter-personal pattern in the social universe. The social atom reaches as far as one's tele reaches other persons. It is therefore also called the tele range of an individual. It has an important operational function in the formation of a society. (Moreno,J.L. 1937)

The individual is born from the organic placenta into the social placenta and always lives in a "Social Atom". The Social Atom consists of people in the emotional world of a person.(Altınay, D. 2015). J.L.Moreno (1953) says that the individual who becomes sick in social relationships will also recover in social relationships, which is group and group psychotherapy. In this sense, social atoms of individuals should provide important information about their mental structure. According to the hypothesis of the research, the individual personality structure and each pathological condition develop within the social atoms. Social Atom is a role modeling of the significant others in an individual's life. Psychodrama is also defined as the treatment of 'Social Atoms' (Altınay, D. 2015) Social Atom has an important operational function in the formation of a society. Interference to Social Atoms is also intervention to society. As it can be seen from this point, studying Social Atoms is important in psychodrama as well as in other disciplines.

The baby is born into a micro atom, mostly composed of mother and father, and in time, in the process of individualization, the individual's social atom begins to expand, diversify and enrich. In the definition and classification of Mental Disorders, the way in which the individuals perceive the world they live in and their social relationships is an important source of data and the 'Social Atom Test' provides this data to us in a wide range.

The tele range of an individual is the smallest constellation of psychological relations which can be said to make up the individual cells in the social universe. It consists of the psychological relations of one individual to those other individuals to whom he is attracted or repelled and their relation to him.(Moreno,J.L. 1939)

The social atom is that peculiar pattern of inter-personal relations which develop from the time of human birth. At first it contains mother and child. As time goes by, it adds the persons who come into the child's orbit, as such persons are unpleasant or pleasant to him, and vice versa, and those towards whom he is unpleasant or pleasant. Persons who do not leave any impression, positive or negative, remain outside the social atom as mere acquaintances. The feeling which correlates two or more individuals has been called tele. The social atom is therefore a compound of the tele relationships of an individual. As positively or negatively charged persons may leave the individual's social atom and others may enter it, the social atom has a more or less ever-changing constellation. (J.L. Moreno, 1939, 1943.)

Fenichel says that 'we are individuals to the extent that we feel as separate and different from others. In the process of individualization, one's social atom begins to expand, diversify and prosper. The healthy individual slowly moves away from the mother, father and child triangle, and begins to place second-degree relatives, friends and trainers in the social atom (Fenichel,O. 1974).

The concept of spontaneity was first introduced to psychotherapy by Moreno (1953) who considered it a major contributor to well-being. His theory and the psychodrama group psychotherapy he created are based on the notion that a spontaneous person is a mentally healthy one. It is certain that a healthy person should have a healthy social atom and an unhealthy person should have an unhealthy social atom. The necessity of defining a healthy and unhealthy social atom is evident. This is one of the objectives of this article in which this research is concerned. This should be directly related to the spontaneity of the person. Spontaneity is a health criterion. The concept of the social atom allows us to unite a great complexity that emerges in the social universe under a common denominator (Moreno, 1953). Emotional injuries in an individual's life are largely due to human relationships, which cannot be confined to intrapsychic events (Moreno, Z. 1989). In this sense, the social atom reflects the necessary relationships in order for the individual to experience his/her own experience of belonging and social cohesion (Taylor, A.J. 1984).

As the individual projects his emotions into the groups around him, and as the members of these groups in turn project their emotions toward him, a pattern of attractions and repulsions, as projected from both sides, can be discerned on the threshold between the individual and group. This pattern is called his "social atom." It is not identical to the formal position an individual occupies in the group (his position in the family, for instance). It evolves as an inter-personal structure from the birth-level onward. The social atom is the first empirically discernible tangible structure in the formation of a human society. It is its smallest unit. (Moreno,J.L. 1941)

All these definitions tell us why Social Atom is an important concept. Social Atom contains the most vital information for the person. This article and the research have been prepared due to this important fact.

METHOD

The sample of the research consist of 30 psychotic patients, 35 neurotic patients and 30 normal individuals as a group of people from 16 to 45 years old. 'Social Atom Scale' has been applied to the individuals forming the sample group and these groups have been compared using SAT (Social Atom Test). The choosing of the members in the psychotic and neurotic groups was collected in 1.5 years with the help of psychological tests, clinical reports and evaluations of two psychiatrists. Care has been taken to make the diagnosis of individuals as clear as possible. The Social Atom Test consists of 2 pages and is individually administered by the practitioner to all subjects. The first page is designed to list and retrieve information that may be present in the person's life. The second page is a social atom diagram consisting of 6 intertwined circles. Psychotic, neurotic and normal groups were selected as equivalent groups in terms of gender, age, marital status and educational level.

Psychotic individuals consisted of 30 patients aged between 23 and 43 years. On a voluntary basis, among 30 cases, 12 females and 18 males who applied to Gülhane Military Medical Academy of Mental Health and Diseases Clinic, and Social Security Institution Dı kapı Ankara Hospital Psychiatry Clinic: Paranoid, catatonic, simple type of schizophrenia (according to ICD-10 draft), undifferentiated type (according to DSM III-R), paranoia (chronic delusional disorder), psychotic depression (unipolar affective disorder).

The neurotic group consisted of 35 patients, 21 females and 14 males. In this group, anxiety disorder, panic disorder, phobic disorder, obsessive-compulsive disorder, hypochondriasis, conversion disorder, somatization disorder, depression, post-traumatic stress disorder, neurotic depression, mourning reaction and eating disorder were selected.

The group of normal individuals consisted of 18 women and 12 men who had not been treated with a psychiatric diagnosis. A total of 30 people. The age range of the normal group was 16 to 45 years old. In the selection of the normal group, we tried to match the variables of age, gender, marital status and educational status according to the characteristics of individuals in psychotic and neurotic groups.

All participants took part in the study voluntarily. They did not receive any type of compensation for their participation in the study.

This scale (SAT) has been developed by Deniz Altınay and Üstün Dökmen.

MEASURE

The six circles in the "Social Atom Test" are evaluated with 1, 2, 3, 4, 5, 6 points. The test used in this study was conducted on the basis of decreasing scores from the outer circle to the inner circle in validity and reliability studies as well. The fact that primary relatives, who are the people closer to the individuals and which do not originate from their own choices, are placed in the first circles and that this does not show individualization, growth and health is the reason for the scoring to be done in this way.

SAT is evaluated under 7 main criteria, which are: 1 - The overall score from the people they place: 6-point-scoring of the innermost circle 1 and 2, 3, 4, 5 and 6 circles of 5, 4, 3, 2, and 1 points, multiplying the number of people placed in each circle by the score of that circle, the sum of the scores is the social atomic score. (For example, 2 individuals in the first circle score 2x6 = 12.) 2 - The total number of the person. 3 - Points of the 'women'. 4 - Points of the 'men'. 5 - Points of the 'relatives'. 6 - Points of 'friends'. 7 - Qualifications of placed persons.

Social Atom Test (SAT) was applied to the individuals who participated in the study. The 't' test was used to check whether the differences between the averages of the groups were significant. All hypotheses have been tested at an error level of 0.05

In the future, projective evaluations of this test can be done in parallel with Taylor's research, which is provided and explained in this article.

As a continuation of this research, correlations and relationships between pages 1 and 2 of the 'Social Atom Test' should be examined and evaluated in future. This will provide us with a much deeper and more helpful information.

RELIABILITY OF THE SAT

The reliability of the Social Atom Test was examined by repeating the test, and the reliability study was conducted on two different groups.
1st Group METU (Middle East Technical University) Senior Students.
2nd Group College Senior Students.

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Table 1 - Reliability Coefficients Of Social Atom Test

SAT POINTS	College	METU
Social Atom Point	0.88*	0.98
Relative Point	0.90	0.94
Friend Point	0.89	0.90
Women Point	0.88	0.92
Men Point	0.84	0.85

* Correlation Coefficients

As shown in Table 1, the relationship between the repetition of the test determined respectively for five different score types was $r = 0.98$ (p <0.01), $r = 0.94$ (p <0.01), $r = 0.90$ 1 p <0.01), $r = 0.92$ (p <0.01), $r = 0.85$ (p <0.01) in METU group. As shown in Table 1, the relationship between the re-measurement scores $r = 0.88$ (p <.0.01), $r = 0.90$ (pc.0.01), $V = 0.89$ pc.0.01), $r = 0.88$ (Pc.0.01), $r = 0.84$ (p <00.1) in College group.

VALIDITY OF SOCIAL ATOM TEST (SAT)

Although a special validity study was not done, Prof. Dr. Üstün Dökmen identified the social atoms of 24 subjects with 3 different approaches;
1. In Psychodrama Group Practice,
2. Within the Social Atom Scale,
3. Within Likert Type Scaling Technique,

No significant difference was found between the averages in the first and second approaches. A significant difference was observed regarding the second and third approaches. This gives an idea of validity.

SIGNIFICANT RESEARCH FINDINGS

Among the three mentioned groups, the individuals in the psychotic group have scored the lowest point in the Social Atom Test, followed respectively by the neurotic and the normal groups.

The ranking remained the same in terms of the number of people placed in the social atom. Psychotics exhibited the weakest social atom patterns, followed by the neurotics and normals respectively.

When, in all three groups, the content of social atoms was examined in terms of gender the difference between the social atom scores of women and men which were placed in the psychotic group was obtained in favor of men. There was no difference between the social atom scores of men and women in the neurotic and normal groups. (The fact that the psychotic group did not place women explicitly in their social atoms suggests that mothers could have a significant negative impact on the process psychosis.)

When the relatives and friends of the subjects placed in the Social Atom Test were compared, relatives were more involved in the social atom in all three groups.

In all three groups, it was observed that marital status and gender differences of individuals did not make any difference in Social Atom Scores.

In terms of the educational status of individuals, it was observed that the social atom patterns did not show much variation in the psychotic and normal groups, but the level of education in the neurotic group caused changes in the Social Atom patterns. (This result shows that "education" and "psychological change" are related in the neurotic group. It can be thought that this is one of the reasons of the effectiveness of the Psychodrama Group Psychotherapy. As a matter of fact, Psychodrama makes training in treatment.)

In terms of the age of individuals, it was observed that social atom patterns did not show much variation in the psychotic and normal groups, but the age variable in the neurotic group created changes in social atom patterns. (It can be said that the neurotic group, compared to other groups, changes and improves with age.)

When the social atoms of all three groups were examined in terms of gender, it was observed that being male or female did not affect the social atom patterns within the group.

In obsessive-compulsive patients, the volume of the social atom excessively increases. The situation can sometimes be the same also in adolescents.

Similarities were observed in the social atom volumes of individuals with depression and chronic psychotic patients.

OTHER SOCIAL ATOM RESEARCH

Jane A. Taylor made a Social Atom research on 10 Normal, 10 Chronic Psychotic, 10 Criminal Individuals. (Taylor, J. 1984.)

In this research, projective and statistical evaluations were made.

The variables such as number of people, dead figures, fantasy figures, genders, relatives, friends, placement styles (proximity, lower side, side, upper side, etc.), drawing and spelling errors, and the way the paper was used were examined.

Differences Between Groups According To The Number Of People In All Three Groups In Taylor's Research			
	CRIMINAL	**CHRONIC PSYCHOTIC**	**NORMAL**
Number of Fantasy Figures	1	1	0
Number of People with No Relationship to the Subject	19	13	14
Number of Dead	6	4	9
Number of Women and Men	32 W, 31 M	30 W, 20 M	46 W, 26 M
Number of Relatives and Friends	55 R., 11 F.	36 R., 14 F.	64 R., 20 F.
Volume of Placed Persons	3-14	2-13	2-15

Besides Taylor's research, Eldon and Rabinowitz (1985) conducted a study with 128 Israeli elementary school senior students about how they perceive important objects and how closely they perceive them.

Likewise, Taylor (1987), conducted a study with 100 university 1st and 2nd grade students in order to show that an 'Occupational Social Atom' plays an important role in occupational choices.

USING SOCIAL ATOM TEST (SAT)

Social Atom Test is an important and fast data source for general recognition of the individual as well as a tool in facilitating understanding of the psychopathological diagnosis of the individual. However, Social Atom Test may play an important role in the choosing process and treatment planning of the members who will be admitted to the group before the Psychodrama Group Psychotherapy.

It is useful to administer the Social Atom Test before the group psychotherapy sessions. Essentially, this test can also be very functional to perform before individual psychodrama sessions and other individual "dynamic orientational psychotherapy" studies. With the help of this test, the therapist will have a reliable relationship map in his hand. Numerical data will provide sensitive information about the general structure and condition of the patient's relations network. This is the social atom. For example The Social Atom Test of a counsel who started talking about important relationships showed that this person had a schizoid structure. This information allows the therapist to listen to him more closely and effectively.

The Social Atom Test, as a pre-test and post-test, can provide important data showing changes in the relationships and perceptions of individuals within the treatment process, but future researches on this subject is essential.

The Social Atom test should also be examined in the context of people who are in one's life but are not placed in their Social Atoms and those who are not placed in their Social Atoms because they are not in one's lives. The first page of the SAT can provide us this data.

The Social Atom test should also be subjected to a projective assessment and the placement patterns and locations and also placement errors should be examined and classified.

This research is suitable for further deeper and more detailed research and is open to new developments.

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