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### EFFECTIVENESS OF ART THERAPY ON PRIMARY MENTAL FUNCTION AMONG SCHIZOPHRENICS

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#### ABSTRACT

Schizophrenia is a complex chronic mental illness that is characterized by positive, negative and cognitive symptoms without racial or socioeconomic prejudice. It affects approximately one percent of the population worldwide and is a leading cause for disability and premature mortality in developed countries. The objective of the study was to assess the level of primary mental function among Schizophrenics, to evaluate the effectiveness of art therapy on primary mental function among Schizophrenics in experimental group and to associate the post test level of primary mental function among Schizophrenics with their selected demographic variables. The conceptual frame work used for the study was based on J.W Kenny's open system theory. A quasi experimental pre test post test with control group design was used in this study. A total of 40 subjects were selected by using non probability purposive sampling technique in a selected Psychiatric centre, Coimbatore. Art therapy was given for experimental group. Data was collected before and after intervention by using Standardized Mini Mental State Examination tool. The study findings showed that the obtained 't' value was 6.95\*, which was significant at  $p < 0.005$  level. It shows that Art therapy was effective in improving primary mental function among Schizophrenics.

#### KEYWORDS

Art therapy, Primary mental function and Schizophrenics.

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#### INTRODUCTION

The word Schizophrenia was coined in 1908 by the Swiss psychiatrist Eugen Bleuler. It is derived from the Greek word skhizo (split) and phren (mind). Schizophrenia refers to a psychotic condition characterized by the disturbances in thinking, emotion and volition and faculties in the presence of clear consciousness, which usually leads to social withdrawal<sup>1</sup>.

Primary mental function refers to the individual's ability in orientation, attention, calculation, memory, recall and language. Primary mental function is moderately to severely impaired in

patients with Schizophrenia. This impairment is the prime drive of the significant disabilities in occupational, social and economical functioning in schizophrenia and an important treatment target. The profile of deficits in Schizophrenia includes many of the most important human cognition such as orientation, concentration, attention, calculation and memory. The Diagnostic and statistical manual of mental illness includes primary mental function as a domain that will need to be evaluated by the clinicians in the course of diagnostic assessment of schizophrenia<sup>2</sup>.

Primary mental function has been firmly established as a predictor of real world community functioning as well as the ability to perform everyday living skills. Severely impaired performance on primary mental function in Schizophrenia revealed that almost all patients with schizophrenia are functioning below the level that would be expected in the absence of illness. Cognitive impairments and associated deficits in the ability to perform everyday living skills are highly related to live independently<sup>2</sup>.

Medication is the mainstay of treatment for Schizophrenia. However, 5-15% of people continue to experience symptoms in spite of medication and may also develop undesirable adverse effects. Art therapy is one of the creative therapies that can be used in addition to medication for helping people with schizophrenia<sup>3</sup>.

The British Association of Art Therapists (BAAT) defines "Art therapy is a form of psychotherapy that uses art media as its primary mode of communication". Art therapy is also unique in the way that art materials are utilised to make a link with and engage severely disturbed people in psychodynamic therapy<sup>4</sup>.

Art therapy is one of the complementary therapies which can benefit a wide spectrum of disorders, disabilities and diseases. It helps the people to improve their mental, emotional and physical status. Art therapy offers unique insights due to nature of its three way process between the client, the therapist and the image or artefact. It provide patients with the opportunity to address issues or express themselves in ways that transcend spoken

or written language. This will provide both therapist and client to a 'traditional' therapeutic environment of one-on-one or group discussions. By creating a work of art, an individual can ventilate his powerful emotions that have been internalized<sup>5</sup>.

### **Objectives**

1. To assess the level of primary mental function among Schizophrenics in experimental and control group.
2. To determine the effectiveness of art therapy on primary mental function among Schizophrenics in experimental group.

### **Hypotheses**

H1: There is a significant difference in the level of primary mental function among Schizophrenics in experimental and control group.

H2: There is a significant difference in the level of primary mental function among Schizophrenics in experimental group before and after art therapy.

### **MATERIAL AND METHOD**

A quasi experimental pre test post test with control group design was adopted for this study. A sample size of 40 patients with Schizophrenia was included into the study purposively based on inclusion and exclusion criteria. Out of which, 20 were allotted into experimental group and 20 to control group. The investigator provided Art therapy techniques including self-portrait, picture completion and painting to the experimental group for a duration of 30 minutes per day for 30 days for improving primary mental function. The data was collected by using Standardized Mini Mental State Examination tool, which consists of five items including orientation, attention and calculation, memory, registration and language.

Demographic variables such as age, gender, type of family, educational status, marital status, previous occupation, period of stay in the hospital were included in the study.

### **RESULTS**

The data obtained was analyzed by using descriptive and inferential statistics on the basis of the objectives and hypothesis of the study.

Table No.1 showed that among 20 subjects in experimental group, 18 (90%) had moderate impairment and 2 (10%) had mild impairment in pre test. In post test, 1(5%) had no impairment, 6 (30%) had mild impairment and 13 (65%) had moderate impairment of primary mental function.

Table No.2 and Figure No.1 reveals that among experimental group, the mean pre test score was 17.75 with standard deviation 2.74, which was less than the mean post test score. The calculated mean difference was 1.25 and the obtained “t” value was 6.95, which was significant at  $p < 0.05$  level.

Figure No.2 reveals that among experimental group, the mean post test score was 19 and in control group the mean post test score was 17.2 with a mean difference of 1.8. The obtained “t” value was 2.307, which was significant at  $p < 0.05$  level.

## DISCUSSION

The study findings revealed that, in experimental group the pre test level of primary mental function, majority of 18 (90%) had moderate and 2 (10%)

had mild impairment of primary mental function and during the post test, 1 (5%) had no impairment, 6 (30%) had mild impairment and 13 (65%) had moderate impairment of primary mental function.

The findings were also supported by Rajeev Krishnadas, who conducted a cross sectional study to find out the relationship of cognitive function in patient with schizophrenia. The results showed that persistent cognitive deficits were observed in patients with schizophrenia<sup>6</sup>.

Regarding the effectiveness of art therapy on improving primary mental function among schizophrenics, the results showed that art therapy was effective in improving primary mental function among schizophrenics.

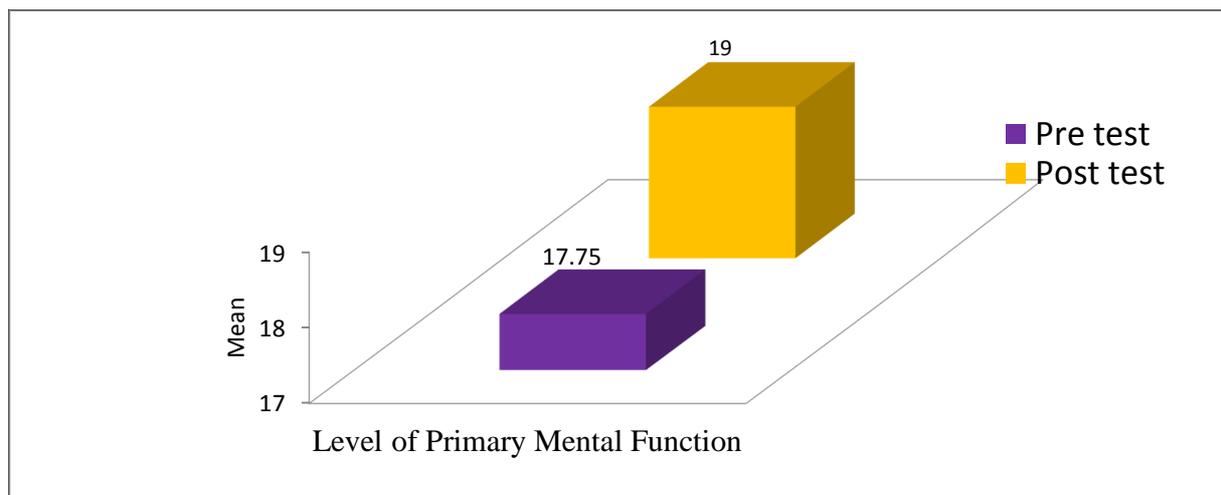
This finding were supported by Crawford MJ *et.al*, who investigated the effectiveness of art therapy among schizophrenics. The study concluded that group art therapy can be used as an adjunctive treatment for schizophrenics<sup>7</sup>.

**Table No.1: Pre-test and post test level of primary mental function among schizophrenics in Experimental group**

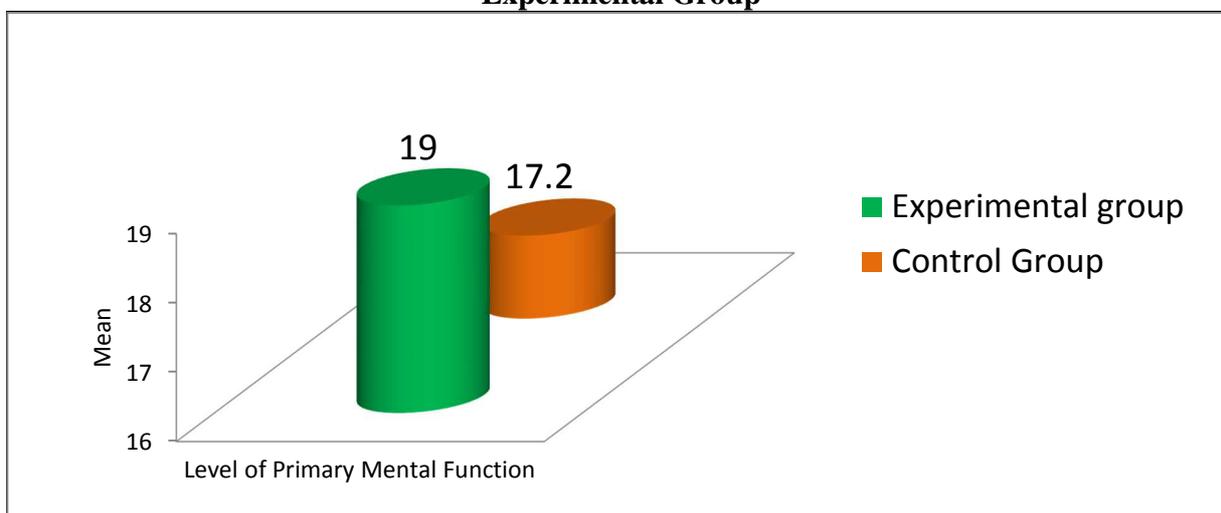
| S.No | Level of primary mental function | Pre test score |    | Post test score |    |
|------|----------------------------------|----------------|----|-----------------|----|
|      |                                  | n              | %  | n               | %  |
| 1    | No impairment                    | -              | -  | 1               | 5  |
| 2    | Mild impairment                  | 2              | 10 | 6               | 30 |
| 3    | Moderate impairment              | 18             | 90 | 13              | 65 |

**Table No.2: Mean, Standard deviation, Mean difference and ‘t’ value of pre-test and post test level of primary mental function among Schizophrenics in Experimental group**

| S.No | Group                                       | Mean        | Standard Deviation | Mean Difference | “t” value |
|------|---|-------------|--------------------|-----------------|-----------|
| 1    | Experimental group<br>Pre test<br>Post test | 17.75<br>19 | 2.74<br>2.61       | 1.25            | 6.95*     |



**Figure No.1: Mean Pre and Post test level of Primary Mental Function among Schizophrenics in Experimental Group**



**Figure No.2: Mean Post Test Value on level of Primary Mental Function among Schizophrenics in Experimental and Control Group (Unpaired “t” test)**

## CONCLUSION

The main conclusion drawn from the present study was that most of the Schizophrenics had moderate and mild impairment of primary mental function in pre test and improved level of Primary mental function in post test. This shows that the selected art therapy for the present study was effective in improving primary mental function among schizophrenics. Art therapy can be taught to the schizophrenics for improving primary mental function.

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## CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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