

# Effectiveness of Art Therapy on Primary Mental Function among Schizophrenics in a Selected Psychiatric Rehabilitation

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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 (1999). A quasi experimental pre test post test design with the control group design was used in this study and 40 samples selected by using non probability purposive sampling technique in Kongunadu Mananala Arakkattalai 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\*. It was significant at  $p < 0.005$  level. It shows that art therapy was effective in improving primary mental function among schizophrenics.

**Key Terms:** Effectiveness, Art therapy, Primary mental function and Schizophrenics.

## Background of the Study

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 [1].

Primary mental function refers to the individual's ability in orientation, attention, calculation, memory, recall and language. Primary mental function is moderately to severely impair in patients with schizophrenia.[2] 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. [3]

Reduction in quality of life strongly associated with primary mental function impairment. The effect of cognitive impairment on

Quality of life in patients with schizophrenia is quite substantial. While primary mental function impairment is a key component of reduced quality of life in schizophrenia.[4]

The most important domains of primary mental function deficits in schizophrenia are memory, attention, concentration, language, problem solving etc. Impairments in primary mental function can result in difficulty in following social conversation, simple activities become laboured or impossible. This results in various aspects of outcomes including social deficits, communication functioning & skill acquisition. Medication is the mainstay of treatment for schizophrenia. However, 5-15% of people continues to experience symptoms in spite of medication and may also develop undesirable adverse effects (Johnstone 1998). Art therapy is one of the creative therapies that can be used in addition to medication for helping people with schizophrenia. [5]

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. 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 states. [6]

Art therapy offers unique insights due to nature of its three way process between the client, the therapist and the image or artefact. It provides

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patients with the opportunity to address issues or express themselves in ways that transcend spoken or written language. This will provides 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. [7]

The main aim of this study is to assess the effectiveness of art therapy on primary mental function among Schizophrenics. Practicing art therapy will enable the schizophrenics to improve their primary mental function. [8]

**Statement of the Problem**

Effectiveness of art therapy on primary mental function among schizophrenics in a selected psychiatric rehabilitation centre at Coimbatore

**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.
3. To find out the association of post test level of primary mental function among Schizophrenics with their selected demographic variables.

**Research Hypothesis**

**H<sub>1</sub>:** There is a significant difference in the level of primary mental function among Schizophrenics in experimental and control group

**H<sub>2</sub>:** There is a significant difference in the level of primary mental function among Schizophrenics in experimental group before and after art therapy.

**H<sub>3</sub>:** There is an association in the level of primary mental function among Schizophrenics with their selected demographic variables.

**Methodology**

**Research Approach:** A quantitative approach was used in this study to evaluate the effectiveness of art therapy on level of primary mental function among schizophrenics

**Research Design:** A quasi experimental pre- test post -test design with control group was chosen for analyzing the effectiveness of art therapy on primary mental function among schizophrenics.

**Research Variables:-**

**Dependent variables:-**In this study, the dependent variable is a level of knowledge regarding stress management.

**Independent variables:-** In this study Structured teaching program is the independent variable.

**Variables**

**Dependent variable:** Primary mental function

**Independent variable:** Art therapy.

**Target Population:** The Target population selected for the study was Schizophrenics with impaired primary mental function.

**Accessible Population:** In this present study the accessible population is schizophrenics with mild & moderate level of primary mental function in Kongunadu Mananala Arakatalai psychiatric Centre at Coimbatore.

**Sample:** Total number of 40 samples was selected for the study, in which 20 samples were included in experimental group and 20 samples were in control group.

**Sampling Technique:** In this study the samples were selected by adopting non probability purposive sampling technique.

**Description of the Tool**

The instrument consists of two sections

**Part I:** Consists of demographic variables of Schizophrenics such as age, gender, and marital status, type of family, educational status, previous occupation, and period of stay in the hospital.

**Part II:** Consists of Standardized Mini Mental State Examination tool used to assess the level of impairment of primary mental function among schizophrenics. The Standardized Mini Mental State Examination Scale was developed by Molloy et.al in (1991).

**Data Analysis and Interpretation**

The study findings are presented in sections as follows:

**Section I:** Data on level of impairment primary mental function among Schizophrenics.

**Section II:** Data on effectiveness of Art therapy on level of primary mental function.

**Section III:** Data on association between level of primary mental function among Schizophrenics with their selected demographic variables.

**Section - 1**

**Table: 1 Frequency and percentage distribution of pre test and post test level of primary mental function among schizophrenics in Experimental group. N=20**

S.No	Level of Primary Mental Function	Pre -test		Post-Test	
		n	%	n	%
01	No Impairment	-	-	1	5
02	Mild Impairment	2	10	6	30
03	Moderate Impairment	18	90	13	65

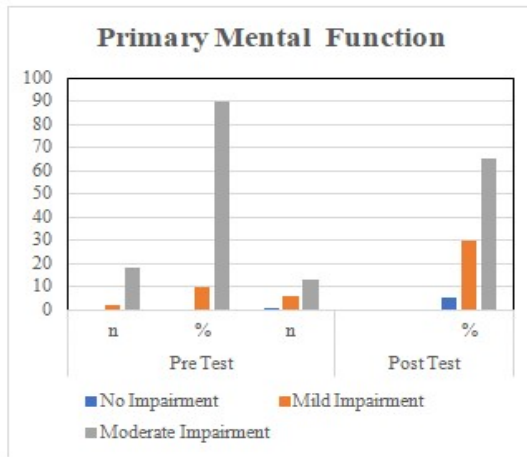


Figure 1: bar Diagram shows the level of primary mental function among schizophrenics in Experimental group

(Table 1 Figure 1) shows that the level of primary mental function among schizophrenics in experimental group. Out of 20 sample, 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 2 Frequency and Percentage distribution of pre test and post test level of primary mental function among schizophrenics in Control group.

S.No	Level of Primary Mental Function	Pre-Test		Post-Test	
		n	%	n	%
01	No Impairment	-	-	-	-
02	Mild Impairment	2	10	2	10
03	Moderate Impairment	18	90	18	90

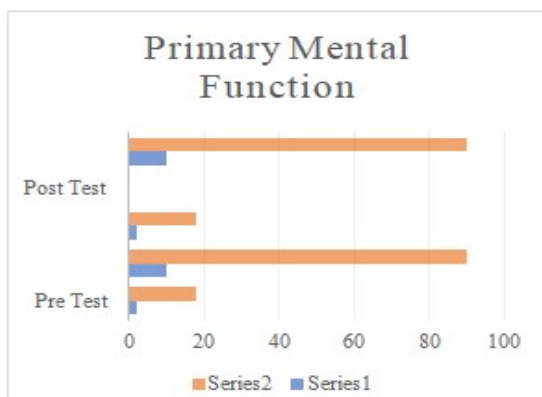


Figure 2: Vertical Bar Diagram shows the level of primary mental function among schizophrenics in Control group

(Table 2 Figure 2) shows that the level of primary mental function among schizophrenics in control group. In pre test and post test score 18 (90%) had moderate impairment and 2 (10%) had mild impairment of primary mental function.

Table 3 Mean, Standard deviation, Mean difference and 't' value of pre test and post test level of primary mental function among Schizophrenics in Experimental group and Control group. N = 40

Sl. No.	Group	Mean	Standard Deviation
01	Experimental Group		
	Pre test	17.75	2.74
	Post Test	19	2.61
02	Control Group		
	Pre test	17.1	2.42
	Post Test	17.2	2.48

Table 3 reveals that among experimental group, the mean pre test score was 17.75 with standard deviation 2.74 was less than the mean post test score 19 with standard deviation 2.61.

Among control group, the mean pre test score was 17.1 with standard deviation 2.42 was less than the mean post test score 17.2 with standard deviation 2.48.

Section - 2

Table: 4 Mean, standard deviation and mean difference and 't' value on post test level of primary mental function among Schizophrenics in Experimental and Control group. N=40

Group	Mean	Standard Deviation	Mean Difference	"t" value
Experimental Group	19	2.61	1.8	2.307
Control Group	17.2	2.48		

Table 4 reveals that among experimental group the mean post test score was 19 with standard deviation 2.61 and in control group the mean post test score was 17.2 with standard deviation 2.48. The mean difference is 1.8. The obtained "t" value is 2.307 was significant at p<0.05 level.

Hence the stated hypothesis was accepted. It is inferred that art therapy is effective on improving primary mental function among schizophrenics.

Section - 3

Data on Association between Primary Mental Function and their Demographic Variables

In experimental group, after art therapy intervention, with regard to age, gender, marital status, type of family, educational status, previous occupation, period of stay in centre, have no statistically significant association with primary mental function among schizophrenics

In control group, after art therapy intervention, with regard to age, gender, marital status,

type of family, educational status, previous occupation, period of stay in centre, have no statistically significant association with primary mental function among schizophrenics and the stated hypothesis H3 is not accepted.

**Nursing Practice:** Clinical nurse can:

- Learn accurate assessment of primary mental function by using Standardized Mini Mental State Examination tool.
- Learn the techniques of art therapy
- Impart art therapy to the schizophrenics in hospital.
- Understand the importance of art therapy as an adjuvant to the pharmacological therapy.
- Encourage the use of art therapy as a complementary therapy in improving primary mental function among schizophrenics
- Recognize the findings of the current study which can be used as a baseline to provide instructions to schizophrenics with primary mental function impairment.

**Nursing Education:** Nurse Educators can:

- Teach the assessment of level of primary mental function and effectiveness of art therapy on improving primary mental function among schizophrenics, as an independent nursing intervention.
- Provide adequate exposure to students to a setting where art therapy is practiced.
- Teach art therapy using audio visual aids, group conference etc.

**Nursing Research:** Nurse Researcher can

- Encourage future research studies on the effectiveness of art therapy on Primary mental function among schizophrenics.
- Disseminate the finding through the conference, seminars, publications,
- National and international journal and World Wide Web.

**Nursing Administration:** Nurse Administrator can:

- Organize in-service education program for the nurses on this complementary technique.
- Make cost effectiveness on the nursing care by reducing the usage of medications among schizophrenics

- Encourage nurses to conduct research on various complementary techniques.
- Provide opportunity for nurses to attend training program on art therapy.

## 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 their 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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