Cognitive Styles of Psychotic and Neurotic Patients

Poonam Singh and Seema Rani Sarraf

ABSTRACT

Cognitive style or “thinking style” describe the way individuals think, perceive and remember information, or their preferred approach to using such information to solve problems. Cognitive style differs from cognitive ability (or level), the latter being measured by aptitude tests or so-called intelligence tests. It refers to all the processes by which the sensory input is transformed, reduced, elaborated, stored and used. In the present study attempt have been made to explore cognitive style of psychotic and neurotic patients and comparison was made. Accordingly a group of 160 patients (80 neurotics and 80 psychotics) were selected as subjects in this investigation. A case study format and Cognitive style inventory was administered to them. The samples were taken from Mental Hospital, Bareilly, Uttar Pradesh. Psychotics show high occurrence of split and undifferentiated cognitive styles while neurotics used mostly integrated and systematic style.

INTRODUCTION

Cognition refers to the inner process and products of the mind that leads to knowing. It includes all mental activity — attending, remembering, symbolizing, categorizing, planning, reasoning, problem solving, creating, and fantasizing. Cognitive style refers to a recurring pattern and different modes of functioning that characterized of individual’s perceptual and intellectual activity. According to Segal and Brodzkindly (1977), “Pattern of thought and behavior that influence learning and problem solving techniques are known as cognitive style”.

Theories about cognitive styles were developed as a result of early studies conducted by Witkin et al. (1954; 1962) and Bruner (1966) that generally assumed a single dimension of cognitive style with two extremes. The two extremes were described by Keen (1973), Mckenny and Keen (1974) and Botkin (1974) as the Systematic style and Intuitive style. The Systematic style is associated with logical, rational behaviour that uses a step-by-step, sequential approach to thinking, learning, problem solving and decision making. The intuitive style is associated with a spontaneous holistic and visual

Poonam Singh: Guest Lecturer, Department of Applied and Clinical Psychology, M.J.P. Rohilkhand University, Bareilly.

Seema Rani Sarraf: Guest Lecturer, Department of Applied and Clinical Psychology, M.J.P. Rohilkhand University, Bareilly.
approach. Martin (1983) postulated a multi-dimensional model intended to reflect the entire spectrum of cognitive style. This model consisted of two continuum: (1) high systematic to low systematic and (2) high intuitive to low intuitive. Ongoing studies have resulted in an expanded version of this model which led to the development of five following styles:

1. **Systematic style** — an individual who typically operates this style uses a well-defined step-by-step approach.

2. **Intuitive style** — the individual whose style is intuitive uses an unpredictable ordering of analytical steps when solving a problem.

3. **Integrated style** — a person with this style is able to change styles quickly and easily.

4. **Undifferentiated style** — a person with such a style appears not to differentiate between the two styles and therefore not display a style.

5. **Split style** — people with this style do not possess an integrated behavioural response; instead, they exhibit each separate dimension in completely different setting.

**Psychosis**

Psychosis is a severe disorder in which the person has typically lost considerable contact with reality; hallucination or delusion may be present and custodial care is often required. The term psychosis is defined as:

- Gross impairment in reality testing (contact with reality).
- Marked disturbances in personality with impairment in social, interpersonal and occupational functioning.
- Marked impairment in judgment and absent understanding of the current symptoms and behaviour (loss of insight).
- Presence of the characteristic symptoms like delusion and hallucination.

The major psychotic disorders are schizophrenia, mood disorder, paranoid disorder and delusional disorder.

**Neurosis**

In neurosis, a person is usually anxious, miserable, troubled or incapacitated in his or her work and relations with other people. The person often attempt to ward off anxiety by using exaggerated defense mechanisms. The term neurosis is defined as:

- The presence of a symptoms or group of symptoms which cause subjective distress to the patients.
- The symptoms are recognized as undesirable (i.e., insight is present).
- The personality and behaviour are relatively preserved and not usually grossly disturbed.
- The contact with reality is preserved.
- There is an absence of organic causative factors.

The major neurotic disorders are — generalized anxiety disorder (GAD), phobic disorder, obsessive compulsive disorder (OCD), dissociative (conversion) disorder and somatoform disorder.
Vulnerability to anxiety disorders such as GAD hinges on the development of maladaptive variants of cognitive structures called danger schemas that guide information processing. Once activated by negative life events these danger schemas lead individuals vulnerable to anxiety disorders to overestimate the magnitude and severity of threat and underestimate the extent of their coping resources. According to Borkovec et al. (1998) worry functions as a cognitive avoidance response to threatening stimuli such as fear-related mental imagery, negative emotions, or bodily sensations.

Most studies have shown that paranoid schizophrenics show less impairment of cognitive and social skills than do non-paranoid schizophrenics (Blatt & Wild, 1976; Chapman & Chapman, 1973). Paranoids are found to have better premorbid adjustment (Zigler & Levine, 1973) and do better on tasks of greater cognitive complexity (Hirt, Cuttler & Genshaft, 1977), perceptual recognition (McCormick & Broekema, 1978), multicue judgment (Gillis & Blevens, 1978), and neuropsychological tests (Goldstein & Halperin, 1977). One consistent characteristic that differentiates paranoids from normal individuals is rigidity in thinking and response, leading in some tasks to greater latency and then jumping to conclusions (Broga & Neufeld, 1981). Scott (2004) have hypothesized that individuals with bipolar disorders show greater day-to-day variability in cognitive styles and have a self-esteem that is more vulnerable to shift in response to external events. During the past years there has been a steady progression and shift in understanding of cognitive styles. Most of the investigators focused on memory, attention, negative schemas, and intelligence. However there seems a dearth of studies on specific cognitive styles of neurotic and psychotic patients. Hence, the present study was undertaken with a view to assess and compare cognitive styles in neurotic and psychotic patients.

**Hypothesis**

(1) A trend in cognitive style between psychotic and neurotic patients would be present

**METHOD**

**Sample**

The sample consisted of two groups of subjects *i.e.*, psychotic group and neurotic group. Total sample consisted of 160 individual of both sex. Patients were recruited from the Mental Hospital, Bareilly, Uttar Pradesh. Diagnoses were made according to DSM-IV-TR criteria with case study format. Among 80 psychotic patients, 40 subjects had a diagnosis of Schizophrenia (18 paranoid, 14 undifferentiated and 8 residual), 26 had a diagnosis of psychotic mood disorder (11 Bipolar I Disorder, 15 Bipolar II Disorder), and 12 had diagnosis of Schizoaffective disorder and among 80 neurotic patients 44 had diagnosis of Generalized anxiety disorder, 36 had diagnosis of Obsessive compulsive disorder. Inclusion criteria were one of the previously cited diagnoses and the presence of psychotic symptoms. Exclusion criteria were organic illness involving the central nervous system, current substance abuse and /or past and current alcohol dependence, and clinical evidence of mental retardation.

**Tool**

The test instrument that was selected for the present study was the Cognitive Style Inventory (CSI) by Jha (2001). The dimensions of the test were systematic style, intuitive style, integrated
style, undifferentiated style and split style. The split-half reliability of CSI is found .65 while the test-retest reliability of the whole test is .39.

**Procedure of Data Collection**

After establishing good rapport with participants researcher interviewed and informed them about the test individually. Researcher read the instructions loudly, while subject read them silently along with the researcher. The subject has to respond to each item by making a tick among one alternative of each item. No time limit has been set for the test. The researcher collected all questionnaires after completion.

**Scoring**

CSI is a self report research tool which gives an estimate of cognitive style of an individual in a five-point-Likert format. Five response categories are: strongly disagree, disagree, undecided, agree, and strongly agree.

**RESULT AND DISCUSSION**

Participants’ answers to cognitive style inventory were thereafter analyzed and scored. The responses are scored by adding all the response number indicated in left of each item which yields a systematic score and an intuitive score. These scores are interpreted which helped to determine to what degree they specialize in systematic and intuitive styles and identify the specific cognitive style to which they belong. All the data was categorical, so the numbers of cases showing specific cognitive style were counted and converted in to percentages and has been presented in table 1.

**Table 1: Showing the Percentage of Cognitive Styles of Psychotic and Neurotic Patients**

| Cognitive Style | Psychotics |  | Neurotics |  |
|-----------------|------------|-----------------|--------|
|                 | No. of Cases | Percentage of Cases | No. of Cases | Percentage of Cases |
| Systematic      | 08 (Bipolar II Disorder) | 10% | 20 (09 Generalized anxiety disorder, 11 Obsessive Compulsive Disorder) | 25% |
| Intuitive       | 10 (Bipolar I Disorder) | 12.5% | 09 (Generalized anxiety disorder) | 11.25% |
| Integrated      | 08 (03 Paranoid Schizophrenia, 04 Bipolar II Disorder, 01 Bipolar I Disorder) | 10% | 28 (20 Generalized anxiety disorder, 08 Obsessive Compulsive Disorder) | 35% |
| Undifferentiated| 34 [22 Schizophrenia(14 undifferentiated 08 residual) 12 Schizoaffective] | 42.5% | 06 (Generalized anxiety disorder) | 7.5% |
| Split           | 20 (15 paranoid schizophrenia, 02 delusional disorder, 03 Bipolar II Disorder) | 25% | 17 (Obsessive Compulsive Disorder) | 21.25% |
Table 1 shows percentages of specific cognitive styles used by psychotic and neurotic patients. Systematic style is associated with logical, rational behaviour that uses a step by step, sequential approach to thinking, learning, problem solving and decision making. The percentage of systematic style of psychotics came to be 10% (Bipolar II) where as that of neurotic group came to be 25% (09 GAD, & 11 OCD) which showed that neurotic operates on a well defined step-by-step approach when solving a problem. The percentages of Intuitive style of neurotics and psychotics were similar came to be 11.25% (09 GAD) and 12.5% (10 Bipolar I) respectively. There was minor difference in both the groups. It reflected an unpredictable ordering of analytical steps during problem solving. Neurotic patients show integrated style 35% (20 GAD & 08 OCD), it can be inferred that they possess ability to change style quickly and easily in equilibrium. It was seen that 10% (03 Paranoid, 04 Bipolar II & 01 Bipolar I) psychotic patients showed integrated style. This indicates that they have lack of ability of quickly changing styles in comparison to neurotic group. The Undifferentiated style is higher in psychotic patients i.e. 42.5% (14 undifferentiated, 04 residual & 12 Schizoaffective) which indicates mostly they are withdrawn, passive and often look to others for problem solving strategy where as only 7.5% (06 GAD) neurotics used this style. The Split style generally relates to an individual’s ability of operating on fairly equal degrees of systematic and intuitive specialization, one at a time in completely different settings. 25% (15 paranoid, 02 delusional disorder & 03 Bipolar II) of cases showed split cognitive style which reflects their ability to use both systematic and intuitive specialization, each one at a time, in different situations.

REFERENCES


