CLINICAL APPLICATION OF RORSCHACH IN DIAGNOSING PARANOID SCHIZOPHRENIA: A CROSS-CULTURAL COMPARISON

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There is accumulating evidence that projective techniques can be successfully used in clinical differential diagnosis. Rorschach is one of the most powerful techniques employed for this purpose. The advantage of a projective technique, especially Rorschach, for clinical diagnosis lies in its nonreactive nature and the response-facilitating characteristic for the psychologically and mentally disturbed unresponsive individuals. Even minimum responses of a patient to Rorschach may be interpreted to have some ideas about his mental state. Rorschach can be effectively utilized in our socio-cultural context for a number of reasons (Farooqi, 1987). The incidence of mental illness is presumed to be high in our poor and illiterate population. These persons cannot be administered a verbal clinical test, e.g., MMPI for diagnostic purposes. Moreover, in the absence of indigenous criteria and norms for the classification of mentally ill, the majority of the clinicians make use of their own clinical experience in diagnosing the illness of a patient. This may lead, in considerable number of cases, to erroneous judgments. The use of Rorschach, as a diagnostic instrument, would be helpful in arriving at a more objective assessment. Thus, studies are needed to be conducted to develop the norms for different diagnostic categories and to determine Rorschach's diagnostic validity. The present study is an attempt to explain the method and procedure of using Rorschach for diagnostic purpose in the case of paranoid schizophrenia.

Rorschach is the most widely used projective technique for personality assessment (Piotrowski, Sherry, & Keller, 1985). Many studies indicate that the specific response patterns to Rorschach cards could be successfully used in the assessment of personality dispositions (Archer & Gordon, 1987). Rorschach can be used
both individually and in groups for personality assessment, but individual administration of Rorschach makes it more useful for clinical diagnosis.

There is a good deal of evidence of Rorschach’s use for clinical diagnostic purposes (Archer & Gordon, 1987). The specific patterns of responses on Rorschach cards and variations in these patterns in the case of different patients are helpful in diagnosing various mental and behavioural disorders (Exner, 1986).

It has been shown that in schizophrenics, the typical personality features are thought disorders, impaired perceptual accuracy, poor emotional control and ineffective interpersonal relations. Translated into Rorschach signs, confabulation, contamination, poor negative form level rating, poor F+% and X+% would be expected on Rorschach cards (Mahmood, 1987). Rorschach pattern of responses for psychotic depressives, according to Viglione, Brager, and Haller (1988), are Vista responses (V), Colour-shading blends (C. Sh), Egocentricity index \((3r+(2)/R)\), Achromatic colour responses \((C^-)\) and Morbid content scores (Mor.).

The advantage of using Rorschach for clinical diagnosis also lies in its nonreactive nature and response emitting characteristic. The patients suffering from severe depression or catatonic schizophrenia may not be responsive to verbal tests used for clinical diagnosis. Rorschach could be of some help in such situations. Even limited number of responses having a specific pattern may be helpful in diagnosing the mental state of a patient.

In test-alien cultures and countries with low literacy rate, the development of verbal diagnostic tests and their norms may be a formidable task. The high prevalence rate of mental illness among socially and economically deprived classes, who are either illiterate or low in education, may not favour the use of verbal tests for diagnostic purposes. The problem of diagnosis of mental illness becomes further aggravated when one considers the different socio-cultural background of the patients and their specific reporting styles of the problems. In the absence of a valid diagnostic criterion, a specific reporting style of a patient may interact with the idiosyncratic diagnostic approach of a clinician.
and his personal experience leading towards erroneous judgment. The use of Rorschach having valid diagnostic indicators offers a solution to the problem of clinical differential diagnosis in our socio-cultural context. In order to accomplish this goal, it becomes imperative to conduct studies for establishing the reliability and validity of Rorschach as a clinical diagnostic instrument (Mahmood, 1987).

Paranoid schizophrenics show distinctive styles and set of attitudes toward the environment. They mistrust the motives of others and exhibit fear of being exploited or victimized by others. The combination of these paranoid styles and attitudes with schizophrenic impairment of thinking and perception produces delusions of persecution and grandeur and different hallucinations (Exner & Weiner, 1982).

The onset of paranoid schizophrenia is generally in the late twenties. The estimates show that the incidence of paranoid schizophrenia among adolescents between the ages 10-14 years is 12%; between 15-17 years 21% and between 18-19 years 25% (Weiner, 1980).

Rorschach indices of the major dimensions of paranoid schizophrenia appear in subjects' responses to the test situation, i.e., the structure of their answers, their response contents, and their behaviour in dealing with the inkblots (Schafer, 1973).

The caution and suspicion, delusional orientation and strong emotional control that characterize a paranoid way of relating to the environment could be projected directly into Rorschach signs of unusual location choice, introversion, and constrictions. The presence of these symptoms increases the likelihood of the person to be suffering from paranoid schizophrenia (Exner & Weiner, 1982).

Moreover, the paranoid subject's proclivity to see the world as hostile, dangerous place is symbolized on the Rorschach in two types of content themes: experienced external threat and need for protection (Exner & Weiner, 1982).
Generally speaking, when the schizophrenics focus their attention on rare details (Dd) and white spaces (S) on the Rorschach cards, then they are more likely to be suffering from paranoid schizophrenia.

Paranoids' reluctance to reveal their thoughts and feelings make them shy and they lack spontaneous expression. As they are concerned with keeping their affective behaviour under control, they tend to avoid giving colour responses. These tendencies, when projected on Rorschach, reveal introversive experience type of patient, which are important clues to paranoid schizophrenia. The more the schizophrenics emphasize human movements on Rorschach cards and show less affinity for chromatic colours, they are more likely to have paranoid schizophrenia.

Besides, the characteristic guardedness of paranoid individuals results in their constrictive pattern of responding to Rorschach, low popular responses, reduced number of total responses and high animal percentage.

Paranoid schizophrenics are prone to perceive aggression in the intent of others which is projected on Rorschach cards in specific responses such as arguing, fighting or killing of humans or animals. Paranoids' heightened need for protection is projected in Rorschach responses of dehumanized or belittled humans (H) in their capacity to influence, injure others (Exner & Weiner, 1982).

Characteristically, a paranoid defends himself against guilt and anxiety by the projection of his own hostile impulses upon others. He is preoccupied with supposedly threatening human objects, which is reflected in an abnormally high movement responses (M column) having sinister content in the Rorschach psychogram. Typically, the contents include figures which are unreal or pseudo-human, such as ogres, monsters, horrific fictional characters and animals with destructive human-like attributes. Rorschach responses of paranoid schizophrenics contain a number of rare details (Dds), with over rigid and precarious control indicated by high F+% and acting out tendencies, i.e., aggressive contents (Alcock, 1963).
The way the schizoid subjects approach and comment about the Rorschach cards and the test situation often provide clues and help to identify undue guardedness and suspicion that are common to paranoid status. Rorschach behaviour manifestations of paranoid schizophrenia, i.e., subject's behaviour during testing are: externalization of blame, situational distrust and reluctance to make a comment, which are exemplified as: 1) the cards aren't made very good; 2) suspicion about the nature and purpose of testing; 3) in addition to many questions the paranoid reads the back of the cards, complains about not receiving detailed instructions, etc. (Exner & Weiner, 1982).

As far as response patterns of schizophrenics to Rorschach cards are concerned, it would be interesting and informative to know whether the pattern of responses of Pakistani schizophrenics exhibit the general response patterns found in the studies discussed above, or they show some unique patterns characteristic of Pakistani culture and society. This would be a relevant question regarding the validity of pattern of responses on Rorschach to be used for diagnostic purpose cross-culturally.

METHOD

Sample

The subject was a young girl of 22 years, who was hospitalized in Pakistan Institute of Medical Sciences, Islamabad, with the clinical diagnosis of paranoid schizophrenia. She was admitted in the hospital two months back and had the history of schizophrenia for the last two years. When the test was administered to the patient she was under the treatment of a psychiatrist.

Rorschach test was administered to the patient according to the standardized testing procedure. It took approximately 24 minutes and 26 seconds to complete the test. Before actual testing the examiner developed rapport with the patient. In accordance with the standard testing procedure, three factors were taken into account in preparing the patient for the test: a) the testing environment; b) seating arrangement of the patient and the
examiner; c) test equipment and the initial instructions to the patient. The patient was given instructions as suggested by Klopfer, et al. (1956). The administration of the test, performance proper and inquiry were also based on the procedure laid down by Klopfer, et al. (1956).

Scoring

Scoring procedure for location and determinant were derived from Klopfer, et al. (1956). The only deviation was made in terms of form level rating. F responses were scored as F+ or F−, according to Beck, Levitt, Beck, and Molish (1961) criteria. The content categories were partly based on the Rorschach (1922/1975) itself and partly as described by Beck, et al. (1961) and Klopfer, et al. (1956).

RESULTS

Results are summarized in two tables. Table 1 gives an overview of patient’s main responses and Table 2 the quantitative summary of the protocol of patient’s responses.

Table 1

Basic Relationships of Patient’s Main Rorschach Responses

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Total Responses</td>
<td>R 22</td>
</tr>
<tr>
<td>Total Time</td>
<td>T 1456 Sec.</td>
</tr>
<tr>
<td>Average Time per Response</td>
<td>T/R 66 Sec.</td>
</tr>
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</table>

Average Reaction Time:

Achromatic Cards (I,IV,V,VI,VII) 29 Sec
Chromatic Cards (II,III,VIII,IX,X) 12 Sec
Popular Responses 4
Original Responses 17
Sum C(FC+2CF+3C/2) 1.5
M:Sum C 5:1.5
(FM+m):(Fc+c+C) 4:1
(Responses to Cards VIII+IX+X)/R 14
W : M 5:5
Table 1 shows that patient gave 22 responses in total. She took 1456 seconds to complete the test, an average of 66 seconds per card. Her average reaction time to Achromatic cards (I, IV, V, VI, & VII) was 29 seconds and to Chromatic cards (II, III, VIII, IX, & X) it was 12 seconds. Out of 22 responses, patient gave 4 popular and 18 original responses. Patient’s sum of colour responses (FC+2CF+3C/2) is 1.5. Ratio of movement and shading responses is 4:1. Patient gave 14 responses to the last three colour cards (VIII, IX, & X). Ratio of whole and movement responses is 5:5.

Table 2

Quantitative Summary of Rorschach Protocol of a Paranoid Schizophrenic

1. Apperceptive Mode (Location)

<table>
<thead>
<tr>
<th>Location</th>
<th>Frequency</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>5</td>
<td>Responses interpreting the plate as a whole were 23%.</td>
</tr>
<tr>
<td>D</td>
<td>12</td>
<td>Responses using large usual details of the plate were 55%.</td>
</tr>
<tr>
<td>d</td>
<td>1</td>
<td>Responses relating to small details were 4%.</td>
</tr>
<tr>
<td>Dd+S</td>
<td>4</td>
<td>Responses using rare details and white spaces of blot were 18%.</td>
</tr>
</tbody>
</table>

2. Quality of the Responses (Determinant)

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Frequency</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>F%</td>
<td>13</td>
<td>59% of the responses were form interpretations.</td>
</tr>
<tr>
<td>F+%</td>
<td>9</td>
<td>Quite a good number, i.e., 41% of the responses were of good form level.</td>
</tr>
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<table>
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<tbody>
<tr>
<td>M</td>
<td>5</td>
<td>Responses to human movements were 23%.</td>
</tr>
<tr>
<td>FM</td>
<td>3</td>
<td>Responses using animal movements were 14%.</td>
</tr>
<tr>
<td>m</td>
<td>1</td>
<td>Inanimate movement responses were only 4%.</td>
</tr>
<tr>
<td>CC</td>
<td>1</td>
<td>Responses to colour and noncolour areas of the blot were 4%, respectively.</td>
</tr>
</tbody>
</table>

3. Variety of Responses (Content)

<table>
<thead>
<tr>
<th>Content</th>
<th>Frequency</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>5</td>
<td>22% the patient’s contents of responses were human.</td>
</tr>
<tr>
<td>A,Ad</td>
<td>8</td>
<td>Animal contents and animal details were 36%.</td>
</tr>
<tr>
<td>At</td>
<td>6</td>
<td>Anatomy contents were 28%.</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>Content of nature was only 4%.</td>
</tr>
<tr>
<td>Fi</td>
<td>1</td>
<td>Content of fire was only 4 %.</td>
</tr>
<tr>
<td>Ar</td>
<td>1</td>
<td>Content of Architectonic objects was only 4%.</td>
</tr>
</tbody>
</table>

Table 2 shows the quantitative summary of patient’s responses reflecting her Location, Determinant and Content scores. She gave 5 responses to the whole blot (23%), 12 (55%) to the large usual details, and one (4%) to the small usual details. She gave 4(18%) responses to the rare detail areas and white space areas of the blot. Patient’s determinant scores are distributed in three sub-categories
of Form, Movement and Colour quantities of blot which include 9 (41%) of good quality responses. Human movement responses are 5 (25%) and animal movements are 3(14%). Responses of inanimate movements are given only once (4%). Patient’s reactivity to colour and non-colour quality of the blots is very low, i.e., once in each of two (4%). Her range of contents is 6 which includes 5 (22%) human contents, 8 (36%) animal contents, 6 (28%) anatomy contents, and 1 (4%) nature, fire and architechtomic contents, respectively.

**Figure 1:** Psychogram of Paranoid Schizophrenic

Figure 1 shows the scores of the subjects on the psychogram. It appears that majority of her responses are on the left side reflecting introversive tendencies and weak emotional reactivity.
DISCUSSION

Patient apparently showed some kind of test anxiety, however, she had no problems in responding to Rorschach cards. She took, on the average, 66 seconds to respond to a particular card. This is regarded as an important indicator of emotional blockage which is hampering the free flow of patient’s association. Throughout the testing she kept on passing remarks/comments on the nature and purpose of testing. She was also critical of the format of the test cards which according to her was not good, but was vague and absurd. In addition, she used to turn the cards in an effort to read what is written on the back. These behavioural manifestations are typical of paranoids’ guardedness and suspicion, which need to be confirmed by patient’s profile interpretation (see Figure 1).

Introversive Tendencies

An initial examination of patient’s psychogram (Figure 1) reveals that the majority of her responses to Rorschach cards are on the left side of the psychogram, suggesting that patient has some problems in reacting freely to her environment (Klopfer, et al., 1956). Patient’s average reaction time per card is 66 seconds which is far above the normal range, i.e., 45-50 seconds. This indicates psychomotor retardation and emotional blocking (Beck, et al., 1961). This emotional blocking is also reflected by the ratio of average reaction time (RT) of non-coloured cards to coloured ones, i.e., 29:12.

Patient’s slow reaction time to non-coloured cards (29 seconds) and slow total time per card (66 seconds) can be interpreted as control over emotions. High number of F(59%) with 41% of good form level also indicate strong emotional control and rigidity. Rigid control over emotions is also revealed by high number of A% (36% animal responses).

Paranoid Indications

F>50% indicates repression and constriction (Exner & Weiner, 1982), i.e., normal range is between 20%-50% with movement and other responses. In this case patient gave 59% of F responses
without much movement, shading and colour responses. Inanimate movements (m) appeared only once in her protocol which indicate the presence of delusional potentials. Moreover, patient gave quite a large number of rare detail (Dd) responses (18%) which are greater than normal criterion of 5-15%. Dd>15 is taken as an important sign of paranoia, and presence of delusional thoughts. These findings are also supported by the presence of human movement responses (M 23%) elsewhere (on card III), which indicates possible paranoid tendencies. Another indicator of paranoia is $M > \text{sum C}$, which is 5:1 in her case. This reflects persistence of her defenses.

Perception of Kings on cards I and VII and their communication (delusional content) also confirms patient’s delusional thoughts. Such references of power and authority are regarded as indicators of passive-submissive needs (Rapaport, Gill, & Schafer, 1968).

**Inner Needs and Oppositional Tendencies**

Perception of architechtomic contents (4%) and reference to white spaces (18%) of the blot reveal disturbance in patient's inner (mental) life, which appears weak, out of joint, and inwardly inharmonious. This is projected in the form of wishfulfillment in the blots. Moreover, patient’s feelings of insufficiency are reflected through the perception of white space responses, which are often found in introversion subjects. These tendencies are confirmed by the majority of responses falling on the left side of the psychogram (Rapaport, et al., 1968), which show that patient tends to rely more on her inner-self.

**Interpersonal Relationship**

Patient seems to have good relationship with others as revealed by quite a good number of human movement responses (25%). However, patient showed signs of anxiety as far as perception of paternal figure is concerned. Perception of giant or supernatural creature on card IV (father card) is also indicative of patient’s passive-aggression, and sign of rebelliousness towards authority.
Proportion of patient's responses to coloured and non-coloured cards is 1:1. Low C and C' responses also indicate sign of depression and low emotional reactivity and perhaps it may be called as the indicator of lack of awareness of affectional needs (Exner & Weiner, 1982).

Percentage of responses to last three coloured cards, i.e., VIII, IX, and X is 14%, indicating low responsiveness to emotional stimuli. Ratio of human movements and colour responses, i.e., M: Sum C is 5:1.5, which also confirms the previous findings. Patient tends to rely more upon her inner life than environment and the ratio of human responses and texture responses (FM+m : Fc+c+C') is 4:1, which indicates that patient's imaginal functions are well developed, to the extent of fantasy, and she tries to conceive the world in terms of her own needs and values.

CONCLUSION

The diagnostic profile of the patient, as revealed by her Rorschach protocol, indicates that the patient's behaviour manifestation to projective material like Rorschach is showing undue guardedness and suspicion which is a common feature of paranoid schizophrenia. An initial examination of patient's psychogram reveals that majority of her responses are on the left side which are indicative of constriction and emotional blocking (Exner & Weiner, 1982). Further, her slow reaction time to non-colour cards and slow total time per card also confirms her emotional blocking (Rapaport, et al., 1968). These findings are also supported by high number of form determined responses, which is taken as strong indicator of the presence of delusional potentials (Goldfried, Stricker, & Weiner, 1971). Subject's high number of responses to the rare details and white space areas of the Rorschach blots also indicate the presence of paranoid tendencies. These findings are further supplemented by the presence of human movement responses given elsewhere (on card III). Perceptions of kings and supernatural figures and their communication and conspiracies also confirm patient's delusional state. Patient's inner life seems weak and disjointed which is projected through the perception of architechtonic objects and responses to the white
spaces of the blot (Archer & Gordon, 1987). A high percentage of movement and texture responses indicate that she tends to rely more on her inner self. She is found good in interpersonal relationships as indicated by human movement responses of good quality. However, she showed some hostile feelings/sign of rebelliousness toward the father figure/authority, which are reflected through her responses to father card (card VII). The patient’s low reactivity to colours (both colour and non-colour cards) can be taken as her lack of awareness of affectional needs. Patient’s reactivity to outside stimulation/environment is very weak, which is reflected through her low percentage of responses to last three coloured cards (VIII, IX, & X).

The pattern of responses found in the case of our subject does not show any marked deviations from those found in the studies conducted in the West (Beck, et al., 1961; Exner & Weiner, 1982; Klopfer, et al., 1956; Mahmood 1987; Viglione, et al., 1988; Weiner, 1980). This suggests that the pattern of responses of schizophrenics to Rorschach cards found in these studies could be used for diagnostic purposes cross-culturally. This highlights the validity of Rorschach as a projective tool. Nevertheless, one should be cautious in drawing conclusions on the basis of a single case study. One may find some specific cultural variations in these patterns of responses if Rorschach is administered to sufficiently large number of patients.

One such indication of culture specific responses is indicated by hostility contents of the responses to the father card IV (Farooqi, 1987). As the Pakistani culture in general, and the child rearing practices in particular, are authoritative (Bibi, 1990), the patient’s responses to this card may generally contain more hostility contents as compared to those recorded in the West. The assumption could be tested only when the protocols of the patients in the West are compared with the ones obtained from the patients in Pakistan.

REFERENCES


