CHAPTER 2
REVIEW OF LITERATURE

This chapter is enlightening the work done on personality by reviewing the literature available on Rorschach as well as on I.S.D.

Nearly 4500 papers have been published in English Language on Rorschach test by year 1971 (Reynolds and Sundberg, 1971). Rorschach used in Research is found to be peaked in the year 1947 - 1965 (Schafer R, 1958). Rorschach received more recommendation from clinicians than any other projective tests in personality assessment.

However, selective review pertaining to the present study has been summarized in this chapter in order to throw the sharp focus on the present work.

The following consideration are used as the guideline for undertaking the present review.

- Studies on demographic variables.
  (i) Western
  (ii) Indian

- Studies to discriminate the different diagnostic categories.
  (i) Western
  (ii) Indian

1) Studies on demographic variables:

It has been the experience of many Rorschachers (Shemon, 1952; Bower, Testin and Roberts, 1960) that patient
groups could be differentiated more successfully when background variables such as sex, education, occupation and domicile are taken up into consideration of interpreting the Rorschach protocol.

(a) **Sex**: 

Differences in the Rorschach variables are not accountable to sex differences, (Light, Zax and Gardiner, 1966; Milner & Moses, 1974). Opposite findings may also be traced in the literature (Ames 1966, Schmitt, 1968). They have reported that in the female subjects W% exceeds D% until adulthood while in the male just reverse trends are observed. Girls in general tend to give an increasing W% with increase of age and boys in general tend to give a decreasing number of H responses (Ames et al, 1971).

(b) **Occupation**: 

It is found to be significant for bringing the changes in the Rorschach protocol. (Roy Choudhury, 1960; Rawla and Gordon 1969). They find that Artists do differ on a number of responses, W, M & H as compared with non-artist. Anastasy (1961, p 50) suggests that test-taking motivation varied widely in different socio-economic groups, A% is also found to vary with socio-economic status, being higher and lower class (Ames et al, 1974).
(c) **Education**

As far as education is concerned there is paucity of studies on the Rorschach. Somasundaram (1964) reports in his normative study that education is found to be related with Rorschach protocol (Dubey, 1932, p 23). The indirect evidence gathered from the observation of various researchers (not limited to the Rorschach) also indicates that education has a strong effect upon psychological test scores.

Anastasy (1961, p 54) maintains that any educational experiences, the individual undergoes, either formal or informal, in or out of school, should be reflected in his performance on tests, sampling the relevant aspects of behaviour. These findings are supported by Carstairs (1960) who reports that uneducated group produces fewer Anatomy responses and more F-responses.

(d) **Culture**

First the present researcher wants to define the term culture. Culture is the distinctive ways of life of a group of people. The whole group or society learns to do certain things in a more or less uniform fashion. This kind of learned behaviour which is its specific aspect is common to a group of people transmitted in some portion by any member of one group to a member or members of another group is called culture.
It is created and transmitted by men. It is having influence on personality (Clyde Kluckhohn, 1964).

Though Rorschach is said to be culture free test but numerous studies (Dale, Siles, 1965; Bleuler and Bleuler, 1935) employing the Rorschach has revealed striking cultural differences in modes of perceiving the test. Cook (1942) reports that the Samoans* tend to give more fine detail responses and less w responses than the Europeans and Americans.

Asthana (1956) shows that culture tends to evolve the defense system in its members which reflects on the Rorschach. The same author reports from another normative study (1950-b) that Rorschach responses can only be correctly interpreted in the light of norms from the specific culturally structured population.

The average number of R has been variously reported of 15 - 45 by the western researchers on their own population (Rorschach, 1951; Klopfer, Ainsworth, Klopfer, Holt, 1964, Rapaport, Gill and Schafer, 1968).

On reviewing the demographic studies the present investigator felt the importance of socio-economic factors and Sex role on Rorschach test in various society. So the present study will be an exploratory work in Gujarati population. No such study has been conducted in this state.

* Samoans is a tribal cultural group.
11) **Use of the Rorschach in India (Non Clinical Group):**

The emphasis has been given the studies conducted in India. Many researches have been done in India. Many of them are not related to the present study. However, before reviewing the literature a short review is given here to highlight the position of Rorschach in India as a research tool.

The first published work is done by Prasad and Asthana on "Rorschach (1947). Since then a large number of articles have started coming on Rorschach covering about all the psychological aspects. For example:

- On school and college population (Asthana, 1950, 1956; Dubey and Verma 1950),
- On juvenile delinquents (Singh, 1948, Agrawal and Sinha, 1976),
- On criminals (Sethi et al, 1971),
- On artists (Roychoudhury, 1965),
- On parents of disturbed adolescents (Mukherjee, 1969),
- On unwed mothers (Hussain, Gulati, Singh and Moni, 1976),
- On different Indian culture and religious groups (Roy, 1955, Castairs, Payne and Wheltake, 1960).
Attempts have also been made to correlate different personality traits with Rorschach indices. The available literature implies that the extroverted persons give more jumble. It also reveals that some attempts have been made to find out the relationship between some of the Rorschach variables and anxiety as measured by Taylor's manifest anxiety scale. It is found that high and low anxiety groups do not differ with regard to F & P. Anxiety is found to increase emotional reactivity to some extent (as referred by Dubey, 1982).

Roychoudhury and Mukhorjee (1969) have tested the kinaesthetic hypothesis of Rorschach which states that while F response increases under inhibition of overt aggressive expressions, the FM and m remain unchanged. They also successfully differentiated the homosexual group on some Rorschach indices like CF, c, etc., and other variables as per the Wheeler signs.

On psychosomatic many works have been done. For example:-
- On headache (Verman, Surya, Jindal and Gupta, 1965, referred by Dubey, 1982),
- On peptic ulcer (Dutta, Jha and Shukla, 1976),
- On ischaemic heart (Ardhaparkar, Mehta, DeSouza, 1967),
- On sexual impotency (Dubey, 1977),
- Mental Subnormality (Upadhyaya and Sinha, 1974, Ojha, 1975),

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- Epilepsy (Vagreema and Sen Majumdar, 1974, 1975).

The findings of these researchers are given in short.

Headache:

No difference in personality is noted (Vorma et al., 1965)

Peptic Ulcer:

Sharma and Hao (1975), have found lower productivity, poor form level or tendency to immaturity and neurotic constriction, dependency on mother, craving for love and presence of conflict. Dutta and his associates (1976) compare Peptic Ulcer with normals. The results show that Peptic Ulcer Patients obtained significantly high M and low F, Ad & P.

Ischaemic Heart Disease:

Ardhapurkar et al (1967) report the similar findings as obtained in Peptic Ulcer like anxiety, low productivity, delayed R.T., high A%, depression and immature personality. Rorschach analysis of impotent cases (Dubey, 1977) shows overall constriction in productivity, inability to stand emotion provoking situation and conflict in sexual area. Percentages of sex and anatomical responses are significantly high in these cases.

Mentally Subnormal:

On this group the findings of Upadhyaya and Sinha (1974) reveal that the subjects having I.Q below 40 give
low R, less shading and colour responses as compared to the subjects who have IQ of more than 40. Ojha (1975) on the basis of study conducted on mentally retarded children suggests that projective tests have limited use with the mentally retarded.

Epilepsy:

Vagrocha and Sen Majumdar (1974, 1975) follow Piotrowski's signs in differentiation of epileptics from normals and found that 5 or more Piotrowski's signs are able to discriminate two groups.

iii) Research in Mental Illness:

The Western and Indian norms are reported to be different on many psychological tests including Rorschach. Cultural differences could show wide variation even in mentally sick persons. It is, therefore, considered not desirable to compare the Western and Indian clinical samples, with regard to their various Rorschach indices in absolute mean values. However, a comparison can be made which may show the change in clinic population with regard to different indices. This can be of some help in understanding the meaning and significance of their indices. So an attempt has been made to review both the Western and Indian literature but they will be presented
separately. Western literature will be reviewed briefly and greater emphasis will be given to Indian Literature.

(a) Western Clinical Studies -

**SCHIZOPHRENIA**

Before reviewing the recent literature it is good to discuss the major differences revealed by Rorschach's system (Rorschach, Beck, Klopfer and Rapaport) on this aspect.

Each of the system has explained that the patients of schizophrenia as a whole give lesser number of responses than the normals. Their manner of approach is confused. They give confabulatory, contaminatory, perseverational and position responses. The number of human movement (M) F+%, and Pure Low, while colour dominating form responses (CF) are more. Pure C responses are present. There is chance of giving the bizarre responses.

Other Western studies have also reported more or less same findings. Quinlan, Harrow, Tacker and Carlson (1972) find that thinking disturbance indicators are present more in Schizophrenic as compared to non-schizophrenic group. Talkington and Reed (1969) have concluded that low F+%, and more colour responses are significant signs to discriminate schizophrenic from non-schizophrenic group.
Bwaag (1966) administered Rorschach on 95 mental patients diagnosed as psychoneurotics and schizophrenics and finds significant differences among the groups with regard to number of responses, rejection, anatomical percentage, popular, movement (referred by Dubey, 1982). Veiner (1961), 1969-a, has stressed on the colour as a Schizophrenic indicator. Orme (1966) finds CF, sum C and CF without e are more frequent in his study of schizophrenic than 50 neurotics.

To summarize the Western studies on schizophrenia it can be concluded the protocols of the schizophrenics are constricted in productivity, number of popular responses and F+ %. They give contabulatory, perseveratory, contaminated and position responses, colour predominating form are frequently used by them.

**NEUROSIS:**

The search for Rorschach neurotic signs has not yielded clear cut results because criteria for the presence of neurosis is generally based on clinical diagnosis. Unfortunately reliability of psychiatric diagnosis has proved generally low and available data suggest that neurotic disorders are among the least reliably diagnosed of traditional nosological categories (Schmidt Fonda, 1956).
The attempt to develop valid Rorschach indices of neurosis from clinical population has been handicapped due to the inconsistency of the diagnosis of clinicians and other methodological problems.

During 1940's a group of researchers (Miale / Harrower, Erickson, 1946; Munrose, 1944; Fisher, 1959; Davidson, 1945; Munsen, 1947) published their empirical findings as neurotic indicators on the Rorschach. Five major systems for scoring Rorschach indices of neurosis or maladjustment evolved from this endeavour. Description of their contributions will be describing here in brief.

Miale and Harrower - Erickson (1940) has described the following nine signs which occur in neurotic records and serve to differentiate them to some extent from normals:

1) The number of responses is not more than 25.
2) The number of H is not more than one.
3) Fil or animal movement responses outnumber the human movement responses.
4) Colour shock occurs
5) Shading shock occurs
6) There is refusal or rejection of one or more cards.
7) More than 50% pure form responses occur.
8) A% is greater than 50.
9) The number of FC responses is not more than one.
It was concluded that the presence of 5 or more of these signs in a protocol is strongly suggestive of neurotic disturbance.

Murroe (1940) developed inspection technique to facilitate brief screening of Rorschach protocols for indices of maladjustment. But the scoring system is extremely complex and involves a series of weights based on the length of the record and interrelationship of various scoring categories.

Helen Davidson (1943) constructed a list for the signs of adjustment.

In 1947, George Muench selected 22 Rorschach factors on patterns of adjustment taken from previous work by Davidson, Hertz and Klopfer.

Fisher developed a Rorschach index of total degree of maladjustment (1950). In his system each relevant sign is given a weighted score determined from its relation to other Rorschach factors and from its presumed degree of significance for maladjustment.

All the above sign lists reflect numerous similarities between Miale/Harrower, Erickson, Murroe, Davidson Muench and Fisher systems (referred by Goldfried; Stricker and Weiner 1971).
Rapepport et al. (1968) describes that neurotics generally give 22 to 28 responses on Rorschach of which nearly 50% are major details. F+ % is usually good and human movement response is low. Sum C is generally high. Blood and sex responses are found mainly in the hysterical neurosis. Popular responses are more than those Schizophrenics. Rejection of cards and shocks (both colour and shading are common in this group of illness.

Moses (1975) in his lecture, Bangalore MIMANS has stressed upon the following as neurotic indicators.

- E is low or extremely high.
- Distinctive variation in form level.
- F+ % is high to very high (70 %).
- FM more than M together with CF more than FC.
- There is disharmony between the two ratios of the experimental balance (M : Sum C).
- There are no or only a few M or excessive M.
- Colour shock present.
- Shading shock present.
- Rejection of one or more card
- Confabulation
- No colour determinates.
- More than one undifferentiated shading responses (K, Kf, K Kf, C, CF)
- Distribution of location is unbalanced (Dubey, 1992, P - 34)
Indices as described by Devos (1975) are not identical to those reported by previous workers. Attempts to find out differences in the Rorschach protocol within the neurotic group have not been very successful.

To conclude, it can be said, in general neurotics give few number of responses, few presence of colour and shocks and more anaesthetic and sex content categories as compared with their normal counter parts.

b) Indian Clinical Studies:

Rorschach test has been used in number of studies. In some of the studies only one clinical group is taken and findings are summarised on the basis of that. Mainly foreign norms and the norms available in this country have been used without consideration of population characteristics.

In some studies the results are reported in a very subjective manner, the validity of which can neither be accepted nor rejected.

There are only a few studies which have taken two or more groups to arrive at a conclusion in differential diagnosis.
Among the single clinical group studies Brar (1970), Bagadia, Anand, Saraf and Shah (1971), Malaviya (1973), have administered Rorschach on Schizophrenics.

Brar (1970) studied on 228 Schizophrenics. The indices of the patients are found extremely varied. Violence is everywhere observed by them, e.g., living being without head, or cut off organs, fighting animal.

The tendency of giving vague and ambiguous confabulatory, contaminatory and abstract responses are noted.

Bagadia et al (1971) studied 250 cases of Schizophrenics and compared with Rapaport's findings.

They conclude poor R, W, F+%, C, F, and more emphasis on blood, sex and At responses.

Malaviya (1973) had also taken only one group of Schizophrenia but it was divided into two, those with attempted suicide and other non attempted suicide. Each group contained 20 subjects, both the groups matched on age, sex, education, occupation, socioeconomic status, marital status, religion, duration of illness, duration of hospitalization and for sub-category of schizophrenia.

The study points out that the Rorschach signs M:
Sum C $\Delta_{4.5}$, PV + VF $\Delta_{10}$, shading and colour in approximately equal degree, could significantly differentiate the
suicide attempted schizophrenics. Suicidal individuals are found to be more suspicious, aggressive, restless, at time preoccupied and showed sudden change in their flow of speech.

Among the studies which compared Schizophrenics with normals, Kumar's (1965) findings were based on a relatively larger sample. He included in his study 150 normals and 150 Schizophrenics matched for age and sex. Rapaport technique had been followed.

Number of responses, percentage of responses on last 3 cards, $F$, $W$, $M$, $FM$, $F+ \%, A\%$, and perseveration are able to differentiate between the two groups at a very high level of significance.

Sen Majumdar and Sinha's (1972) investigation based on a small sample of 15 paranoid Schizophrenics and 15 normal subjects reveal that paranoid schizophrenics have significantly less contact with reality and less ego strength, more hostile emotion, hypochondriacal as compared to normal group.

The studies which can not be conclusive because of small samples used as such Sukla, Hussain and Sinha (1973) Dalbir and Kapur (1983).

In the studies conducted on two or more clinical groups in combination with or without normal controls names of Kumar (1965), Ardhapurkar and Doongaji (1965) -
Asthana (1971), Dubey (1932) are of significance.

These studies are based on a large number of subjects and have included normals as control.

Here it is good to mention that the present author feels that some of the studies are very much significant in relation with the present study but she could not go through the original work intensively due to the non-availability of literature. There she has mentioned the referred author's name who has explained next elaborately.

As referred by Dubey (1932, P-31, F-37) Kumar's study (1939) included 500 subjects, 210 schizophrenics, 57 manic depressive psychosis, 33 psychoneurotics and 200 normals and compared each clinical group with that of normal controls and chi-square test was applied for the level of significance separately for different Rorschach indices. He finds that schizophrenics can be differentiated on R, Rt, W, Dd, Ds, M, FM, Sum C, F+, At, popular, percentage on last three cards, perseveration and rejection of cards. Schizophrenics give low number of responses, Dd, M, and FM, F+%, A %, H %, popular responses and more W, Sum C At, rejection and perseveration as compared to normal controls. Neurotic and normal subjects do not differ on most of the indices except for F+ % and rejection of cards.

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His another study (1960 a) on psychoneurotic groups which followed the Maile - Harrower Erickson in signs are not agreement with all the mentioned sign of M.M.E., except the anxiety group. His several studies (1960, b, 1961,a, 1962, 1965) show that the neurotics and normal subjects do not differ on most of the indices except for F+ %, and rejection of cards.

Aradhvapurkar and Dcogaji (1965) administered Rorschach on 209 (Schizophrenic = 101, Depressive = 20, Anxiety Reaction = 70, Hysteria = 18) subjects. They report that blood and anatomical responses are more in Schizophrenia than in reported literature. Hysterics give more anatomical responses as compared to anxiety reaction and depression.

Subey (1982) had selected army population and taken 300 subjects (100 in each group Schizophrenia, Normal and Neurosis ) and controlled variables of age, education, rank.

In his study, Schizophrenics give pathological response (DM) but it is not present in other two groups. Schizophrenics give less F responses than other two groups. Neurotics stand in between. The same trend is observed in F+ % which is lowest in Schizophrenic (32.10 %) and highest in normals (79 %).

Asthana’s contribution in the field of Rorschach is much more important. He started publishing his work since
1947 and then afterwards he is the only person who has been contributing actively in this field (Asthana, 1950, b, 1956; 1963, 1965, 1966, 1971, Asthana and Mohan, 1977). Most of his work is summarised in an unpublished monograph (1971). In this monograph, a description of Rorschach based upon 1976 subjects including 216 normal children is reported. He compared 180 Schizophrenics, 88 Paranoid Schizophrenics and 42 Neurotics with 450 Normal adults using chi-square test of significance. Schizophrenics in his study give low R, W, D, Dd, M, FC, F+ %, A %, P and more CF, C, H and At and reaction time as compared to normals. Neurotics are also found to be low on R, D, Dd, M, F+ and P and more on all Y as compared to normal controls. The mean number of responses of neurotics (R = 17.15) and Schizophrenics (R = 14.91) are not found to be much different, still they show differences on some of the indices like Dd, Sum C, Y, At, F+ % and reaction time.

Sukla, Hussain, Sinha (1973) had conducted a study on Schizophrenics, criminals and normals (each consisting of 30 subjects). Criminals and normals are not found to be significantly different on F+ % and Schizophrenics and criminals are not found to be significantly different on P.

There are few studies exclusively conducted on neurotic cases also Kumar (1960, a, 1961,a) included 33 normal and 33 neurotic subjects matched for age and sex. It shows,
that neurotics can be differentiated from normals on
two indices eg, F+ % and rejection of cards. Akhtar,  
Pershad and Verma (1975) conducted a study consisting  
of 34 obsessional neurotics, and 16 other neurotics  
and reported obsessional subjects give more d, Dd,  
and M + FM responses.

They administered Rorschach on 30 hysteric patients  
and 30 normal subjects and find that hysterics give  
lesser number of responses, larger number of usual  
detail (d) and significantly lesser number of  
white, space responses. Content analysis reveals that  
hysterics are more preoccupied with mythological human  
figures, animal objects, nature, architecture, clouds  
and sex responses.

The studies as reviewed above are not comparable  
directly with one another because of following reasons.

(1) Use of different method of administering and scoring.  
(2) Sample characteristics are not comparable due to  
demographic characteristics of the sample.  
(3) The studies which are conducted on two or more groups  
have not controlled the important variables like, age,  
education and cultural factors.  
(4) Statistics applied by them may not be appropriate  
because of two groups found to be different in their  
productivity.
In spite of all the above limitations it can be summarized that Schizophrenic group gives more colour dominating responses, low $F^+ \%$, and $P$. In content categories, Anatomical and blood responses are found to be more as compared to neurotic and normal groups. Confabulation, contamination, perseveration are also the important signs of schizophrenia.

In neurotics, the indices found to be helpful in discriminating are total number of responses, $F^+ \% N$; anatomical shading and rejection of cards, (less in neurotics as compared to normal but more than schizophrenics).

These diagnostic indicators are more or less similar to the findings of Western researchers but in absolute sense all the findings within country and between countries do differ to a greater extent.

c) **Normative Studies** :-

There are few normative studies available on solely normal Indian adults.

The largest number of normal subjects was included in the study conducted by Asthana (1971) ($N = 450$). The 2nd study which undertaken, was by Prabhu (1967) on 140 subjects. There is one study from the normal army personnel (O'Netto, Kishore, Ragg 1974). This study was conducted on 100 male normal individuals who had no psychiatric, symptoms and chosen from army population. His group
represented cross-sections of the Indian Society from all parts of the country, Klopf er et al (1954) method was followed and differences are found in total number of responses (less) reaction time, location and content in comparison with the civilian population.

Reviewing the literature it is found that no other psychologist has considered the variables like socio-economic status and sex role. Simultaneously in comparison of Rorschach indices among the normal and clinical groups. So the present researcher has undertaken this study of socio-economic status and sex variables and compares the normals with the clinical groups.

iv) InComplete Sentence Blank Test:

The sentence completion method has become one of the most frequently recommended tests used in clinical assessment batteries. One of the reasons may be the commonalities exist between I.S.B. and T.A.T. such as verbal responses, ambiguous stimuli, interpersonal relationship and test of understanding. Both are influenced by culture. Only difference between the two tests that in I.S.B. verbal stimulus is given more emphasis while in T.A.T. visual stimulus is given priority. So I.S.B. is culture bound whereas T.A.T. is certain extent culture free test.
The main purpose of I.S.B. Test selected in this study as it is also projective test and already standardized on Gujarati Population. Gujaratis are not exposed to test like Rorschach. They may fail to understand the inkblot and its description. On I.S.B. emphasis has been given on verbal stimulus. It may not be difficult for them to complete it. So this test may clarify ideas, attitude and conflict of the subject more clearly.

Here, attempt has been made to review both the Western and Indian Literature. It will be discussed one by one.

a) Western Study:

Fuhlsenon and Gettys (1965) administered Rotter ISB test on 60 female acute chronic patients from mental hospital. In acute cases there was no previous hospitalisation for mental disorder. Chronic cases included the psychotic and personality disorder and Psychosomatics. They found that chronic personality disorders look extremely maladjusted but acute personality disorders look less maladjusted. The reverse trends are found in the psychotic group.

Turnbow and Dona (1961) experimented on 150 male undergraduate subjects to find out the effect of varying stem structure and direction sets on the productivity of clinical hypotheses from sentence completions. Two sets of instructions were used, one emphasized speed of responding, another
emphasized on the true feelings. They found that structured stem elicited responses with more feeling words than unstructured stem.

b) Indian Study:

In India I.S.E. Test has been adopted by Bhatt (1972) on Gujarati speaking population from the original test of Rotter and Rofferty. She has (1971) validated this test on Gujarati speaking population.

A comparative study had been done on the conflict level of maladjusted group by Bhat and Bhat, Chudgar (1976). The test was administered on equal number of normals, neurotics and criminal subjects (each consists 19 subjects) and matched for age, education and economic status. The results are giving some interesting findings. The mean I.S.E. scores of the criminal group represents more or less the mid point among the three groups. The conflict level of neurotics is highest in comparison to other two groups.

A study was conducted (Bhat, 1971) on adjustment problem of under achievers in secondary school children. The obtained data reveals that over achievers are significantly poorly adjusted than the under achievers.
Bhattacharjee (1980) had used the I.S.B. Test on married working women, unmarried working women and non-employed married women. The results indicate that conflict level is higher in married working and non working women than that of unmarried working women.

Summarising above studies it is clear that I.S.B. Test can bring out the conflict level on surface. But unfortunately in India I.S.B. has not been used in many studies on larger number of atypical group. The present investigator has made an attempt to use the I.S.B. Test on patient's group to find out their conflict level and for confirmation of the Rorschach responses.

CONCLUSIONS:

(1) The studies conducted so far in India and West strongly suggested that it is possible to differentiate the neurotic and psychotic groups on the basis of different Rorschach indices, so the present researcher wanted to investigate similar problem on the Gujarati sample.

(2) There is no study done on Rorschach in Gujarati population (both clinical and non-clinical groups). This test is being used more in clinical set up all over the country. Moreover, the culture is a determining factor in differentiation of the responses. Thus there is a great need to study the psychiatric groups in Gujarati population in more details.
(3) Other factors that affect the Rorschach variables as much education, occupation, sex.

Review also suggests the paucity of socio-economic status. There is need to emphasis on this aspect (SSE).

(4) In every research an established test is necessary to compare the result of the new application of the test. In the present study I.S.D. has been selected for this purpose.