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The journal includes (a) research articles (b) book reviews (c) brief reports (d) news about conferences etc. and letters to the editor.

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Editorial

Intellectual Struggles in Advancing SIS Knowledge

Our 4th SIS International conference in November 2000 in Chandigarh India was a tremendous professional success for all those fortunate SIS workers who attended it. Congratulations again to many presenters who stimulated our appetites with an intellectual menu of interesting and highly informative papers. Indian members of our society need special recognition and praise for their hard work and hospitality. They created a socially infectious atmosphere of warmth that was truly contagious.

The meeting was not just an outstanding cognitive event in the historical maturing of our international SIS society It also provided an important opportunity for renewing friendships and expanding emotional connections. Stimulated by the leadership of Dr Bankey l. Dubey, one could sense an intangible but highly meaningful element of spiritual bonding developing between participants. Moreover, the active contribution of meaningful material from both sexes, young and old, stimulated an optimally harmonious blending of psyche energy.

Members of this society need the healing and supportive power of such occasions. The powerful uncovering aspect of the SIS technology places us at the forefront of the battle between good and evil. In this eternal war between the forces of enlightenment versus repression, those who champion the SIS as an interview technique for releasing suffering the “inner cry” - will always be at risk for secondary emotional trauma. The danger we face in our professional work is comparable to that experienced by health workers in treating patients with infectious disease. We similarly can be exposed to the potentially harmful aspects of empathetically experiencing the released painful SIS images. Opportunities to share experiences through such meetings and this journal can revitalize us.

Of course we face other forms of stress. . Frequently there are the professional battles with psychologists who allege that projective testing is not readily quantifiable. Consequently, they erroneously argue, before thesis committees and funding sources, that inkblot techniques are not worthy of serious scientific investigation, financial support etc. In clinical settings where the psychopharmacological treatments often prevail, in-depth psychological assessment may be requested, only as an afterthought. Ironically, if the Rorschach employs Exner’s scoring system applied, as frequently is the case, it is a misnomer. The instrument is not operationally a projective test. In such cases the referring clinician does not gain insight from the richness of content analysis and symbolic interpretation.

Apart from these troublesome issues, if the SIS is employed in clinical populations, the release of the “inner cry” may fall on deaf or even hostile ears. Worse still, are the problems faced when those if power over the suffering individual do not like what is exposed. Often this applies when parents, family members or other in charge of a suffering child are in denial about the true source of the emotional pain. Clinical examples of this will be presented in this edition of our journal.

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The Advisability of Routinely Computing Percentages when Comparing Groups Across Projective Test Variables.

Paul E. Panek, John J. Skowronski and Edwin E. Wagner

It has been firmly established that, when significant differences exist among the total number of responses (R) in comparing groups on data obtained from projective techniques (PTs), it is advisable to also compute comparisons based on percentages obtained by dividing individual variable scores by their respective Rs. The purpose of this study was to determine whether different results would be observed on the projective Hand Test (HT) when comparing raw scores versus percentages, even when the Rs do not significantly differ. The HT was administered to 90 individuals seeking treatment at a pain clinic for three distinct physical maladies, arthritis, fibromyalgia, and migraine headaches. Results indicated that there were no significant differences among the three groups for Rs. A 2 (Gender) X 3 (Pain Groups) ANOVA, with age as a covariate, yielded interpretable groups and two gender effects derived from raw scores. The same results were obtained for percentage comparisons with the exception of one-nonsignificant finding for the repetition (REP) variable. REP is a reliable indicator of an organic brain syndrome and, therefore, it was important to authenticate the significance of this variable. The lack of corroborative support for the percentage comparison suggested caution in over interpreting the differences among the raw scores, especially in an exploratory investigation utilizing small samples.

The Advisability of Routinely Computing Percentages when Comparing Groups Across Projective Test Variables Various statistical methods have been proposed for dealing with comparisons of category responses between groups when projective techniques are employed (Wagner, McCormick, & Alexander, 1984). A particularly difficult issue has been the question of how to control for response productivity; that is how to partial differences due to R when the total number of responses is not the same for both groups. Chronbach (1949) suggested three basic methods for comparing projective test category responses between groups when response productivity differs. These are: 1) re-score a fixed number of responses per protocol; 2) equate subgroups on number of responses; and, 3) analyze patterns of normalized scores. Chronbach further noted that ratio or percentage scores when applied to categories within individual protocols are generally unreliable due to the small denominators and their variability, which in turn affects the reliability of the percentages obtained. Wagner et al., (1984) suggested that one remedy for this situation was to convert component scores to percentages on a group basis and then make comparisons between proportions using the *t* or *z* statistic. Wagner, Prospero, and Alexander (1984) suggested that conversion to percentages is not being advocated as a matter of course but only when the group Rs differ significantly.

Thus, in general, it has been established in the literature that, when significant differences exist among the total number of responses (R) in comparing groups on data obtained from projective techniques (PTs), it is advisable to also compute comparisons based on percentages obtained by dividing individual variable scores by their respective Rs.

However, it would be interesting to determine whether different results would be observed on the projective Hand Test (HT) when comparing raw scores versus percentages obtained by dividing individual variable scores by their respective Rs. We would predict that since there was not a significant difference among respective group As results based on raw scores and results based on percentages would yield identical results.

Method

In order to explore this hypothesis HT protocols from 90 individuals seeking treatment at a pain clinic in the southeastern United States for three distinct physical maladies, arthritis, fibromyalgia, and migraine headaches were analyzed twice. First, a 2 (Gender) X 3 (Pain Groups) ANOVA, with age as a covariate, on the raw scores was conducted. This analysis was followed by the same analysis on percentage scores.

Results and Discussion

Analysis based on raw scores yielded six significant Pain Groups differences for the HT variables of Exhibition ($p < .01$), Active ($p < .01$), Passive ($p < .01$), Total Environmental ($p < .02$), Fear ($p < .01$), and Repetitions ($p < .05$); two significant Gender differences were observed, Direction ($p < .02$) and Acquisition ($p < .02$). Analysis based on percentage scores resulted in five significant Pain Groups differences for the HT variables of Exhibition ($p < .01$), Active ($p < .01$), Passive ($p < .01$), Total Environmental ($p < .03$), and Fear ($p < .01$); two significant Gender differences were observed, Direction ($p < .05$) and Acquisition ($p < .01$). Thus, the only difference between the analyses was that there was a significant Pain Groups difference for the HT variable of Repetitions using raw scores, and this same variable was not significant with the percentage analysis.

Repetitions are a reliable indicator of an organic brain syndrome and, therefore, it was important to authenticate the significance of this variable. The lack of collaboration for the percentage comparison suggested caution in over interpreting the differences among the raw scores, especially in an exploratory investigation utilizing small samples. Finally, the percentage/raw score comparisons could go either way depending on distributional characteristics, i.e., the raw score could be significant and the percentage not. Therefore, the two provide mutual checks on one another. This would be an especially appropriate strategy if there are a lot of significant variables and you want to eliminate the weaker ones, which may have arisen by chance. Finally, in this age of computerization it is a small matter to convert raw scores into percentages and, therefore, this procedure could be recommended as a matter of course.

References

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Chronbach, L. J. (1949). Statistical Methods Applied to Rorschach Scores: A Review. Psychological Bulletin, 46 : 393-429.

Panek, P. E., Skowronski, J. J. and Wagner, E. E. (In Press). Differences on the Projective Hand Test among Chronic Pain Patients Reporting Three Different Pain Experiences. Journal of Personality Assessment.

Wagner, E. E., McCormick, M. K. and Alexander, R. A. (1984). A Method for Coping with Overall Productivity When Making Between-Group Category Comparisons. Journal of Personality Assessment, 48, 85-86.

Wagner, E. E., Prospero, M. K. and Alexander, R. A. (1984). Percentage Conversions as a Method of Enhancing Clinical Discriminations. Journal of Personality Assessment, 48, 617-619.

Portions of this paper were presented at the VIIth European Congress of Psychology, London United (UK) Kingdom, July 1-6, 2001.

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SOMATIC INKBLOT SOCIETY is an International organization helping thru **SOMATIC INKBLOT SERIES TEST (SIS). The SIS** is a structured, projective, diagnostic test and an adjunct to psychotherapy. It helps in hearing the inner cry of suffering individuals.

SOMATIC INKBLOT SOCIETY is publishing its Journal **SIS JOURNAL OF PROJECTIVE PSYCHOLOGY AND MENTAL HEALTH** a half yearly publication in January and July. It has 2 Awards of $250 employing the use of Inkblot Tests SIS & Rorschach.

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Application of Somatic Inkblot Series-I : New Scoring System

Wilfred A. Cassell and Bankey L.Dubey

The Somatic Inkblot series have attracted researchers and clinicians in various countries and the test has been adopted in English, Russian and Italian. Though the SIS-I is the first test in the series, it always emphasized content analysis for the interpretation of responses. It has now adopted a simple indices based scoring system, which helps researchers and clinicians to find out the changes in pre-and post therapeutic intervention. The new scoring system along with interpretation of SIS responses in a case of pain is presented in the paper.

The Somatic Inkblot series have attracted researchers and clinicians in various countries and the test have been adopted in English, Russian and Italian version. Its new scoring system for SIS-II has been used in diagnostic evaluation and to find out the changes in pre and post therapeutic intervention. Keeping the success of SIS-II, the new scoring system for SIS-I was developed and presented as a New Year's gift to SIS Members, Researchers and Clinicians.

Definitions of SIS-I Scoring Indices

Mental health professionals with training and experience in projective techniques will have little difficulty integrating the scoring and charting conventions used with the Somatic Inkblot Series. "Body Symbolism" (Cassell, 1980), can be a resource for increasing one's skill in the interpretation of the original 20 cards SIS responses.

Since the procedure conceptually taps into the same stream of imagery as seen in dreams, daytime fantasies and visual hallucinations, a background in interpreting such content, either in a direct or latent symbolic way, is helpful. Clinicians experienced in art psychotherapy will readily adapt to this technique (Kwiatkowska, 1978; Ulman, 1965). They will find the SIS a useful aid, especially for people who cannot draw. In a sense, the SIS employs art as a diagnostic and therapeutic approach for those who cannot engage in traditional art procedures. Other clinicians with experience in dream interpretation, visualization techniques, guided imagery, active imagination therapies and hypnotherapy will also readily adapt to this procedure (Cassell et al,1996,1997,1997a, 1998, 1999).

There are variations in test taking, with important clinical applications. People who have difficulty in completing the test and who do not respond to a number of video images may be exhibiting denial, avoidance, blocking or repression. Excessively detailed responses suggest obsessive-compulsive traits. Exaggerated verbal responses, while discussing inkblots least liked, suggest affect-laden content. This should be further explored for relevance and meaning to the individual. In some cases, repressed material can burst into conscious awareness, triggered by the semi-ambiguous inkblots. The underlying dynamics of many somatic complaints and personality traits can become

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accessible with this technique (Cassell and Dubey,1998, Dubey et al, 1995,1997,2000).

The eleven categories found to be important in understanding and interpreting protocols are:

1. Total Number of Responses
2. Human Responses
3. Animal Responses
4. Anatomical Responses
5. Sex Responses
6. Movement Responses
7. Most Typical Responses
8. Typical Responses
9. Atypical Responses
10. Rejection of Images
11. Pathological Scales:
    a. Pathological Anatomy (PAS)
    b. Depression (D)
    c. Hostility and Aggression (HAS)
    d. Paranoia (P)

Each category is designed to stimulate consistency among the raters, and to afford commonality in acquiring information for research and normative data collection. The Somatic Inkblot Series has a very simple scoring system. It is less complicated than existing inkblot tests, since it emphasizes content analysis. The following scoring categories have been found to be the most important:

1. Total Number of Responses (R)

The total number of responses is arrived at by counting all the responses given by the subject on the 20 images of the SIS-I Test. This number suggests imaginative capacity and functioning intelligence of the subject. Psychiatrically ill patients will have a poor imaginative capacity and poor functional intelligence.

2. Human Responses (H)

Human responses include the whole human body, or external parts of the human body like face, ear, nose, legs, etc. The category does not include mutilated forms of the whole body or parts of it, such as crushed human being, broken legs or smashed face. These mutilated responses are included in the Anatomical responses. The number of Human responses suggests the patient's interpersonal relationship with human beings. When responses are low, it might be indicative of a desire to be away from humans and schizoid or social isolation tendencies.

3. Animal Responses (A)

Animal responses include living or dead animals such as wild and pet animals, reptiles, birds and sea animals. This category also includes external parts of the animals such as wings, legs, claws, beak, etc., but it does not include mutilated parts of the whole animal such as crushed birds or animals, pulled out wings, etc. Whenever a large number of animal responses are given, interpretation should be that the respondent is less comfortable with people or is psychologically immature.

4. Anatomical Responses (At)

Anatomical responses pertain to internal parts of living beings and their mutilated forms both of humans and animals. These responses are consistently high in those who have a poor self-image and who are preoccupied with internal body organs.

5. Sex Responses (Sex)

Sex responses pertain to the internal or external reproductive system and to sensuous parts of the body. These responses include thighs, buttocks, breasts, fallopian tubes, ovaries, etc. Heightened anxiety and pathology may be associated with either heightened projections or impaired recognition of imbedded sexual structure. These may signify sexual anxiety and/or dysfunction.

6. Movement Responses (M)

Movement responses indicate movement in human beings or animals. Examples include "talking human being," "flying bird" or "running tiger."

7. Most Typical Responses (MT)

Most Typical responses are those, which are given by, more than 75 percent of normal subjects on a particular image (Dubey and Cassell, 1993). The total number of such responses is limited to 9. A higher number of Most Typical responses are suggestive of coherent, logical thinking, and ability to keep up with the demands of society. It may also be interpreted as a measure of ego strength and team concept.

The following is the list of Most Typical responses along with the images eliciting them:

Image	Responses
Card 1	Two Birds
Card 2	Heart
Card 2	Bird
Card 3	Two human beings/ladies
Card 4	Apple/fruit
Card 4	Dancing Lady
Card 9	Kidney/Lungs
Card 15	Spinal Column/Rib Cage
Card 17	Spinal Column/Pelvis

8. Typical Responses (T)

Typical responses are those, which are commonly seen by healthy people on a particular image.

9. Atypical Responses (AT)

Atypical responses are those of poor quality and with vague percept, either in structure or verbalization. A response that markedly departs from the category of typical responses

is also scored under Atypical category. For example, if the viewer gives the response “flower” on image 9 it should be considered as atypical because this image should elicit body anatomy such as kidney/lungs. The number of Atypical responses is proportionate to the degree of psychological or psychiatric disturbance. Perseveration may be a sign of neuropsychological impairment, and is usually absent in normal people.

Below is a list of Typical and Atypical responses on each image:

Typical and Atypical Responses

Image 1

Typical	:	Two persons
Atypical	:	Lungs

Image 2

Typical	:	Clown; happy person
Atypical	:	Woman; heart; mouth

Image 3

Typical	:	Man and woman dancing; hearts; two men or two women dancing
Atypical	:	Two sets of lines; face; eyes; two ants; two animals

Image 4

Typical	:	Woman dancing; Eve and apple; seductive woman; apple
Atypical	:	Male; pregnant woman; heart; rivers and island; snakes

Image 5

Typical	:	Turtle; flying bird; babies on sides
Atypical	:	Stretched animal skin; man flashing two children; smashed animal showing entrails; spinal disc

Image 6

Typical	:	Two lovebirds; heart
Atypical	:	Two (starving) birds fighting for food; lungs; x-ray of chest; leaves

Image 7

Typical	:	Heart; female genitalia; uterus; animal coming out of heart
Atypical	:	Creature from outer space; atomic bomb exploding; x-ray of brain

Image 8

Typical	:	Chest; ribs; heart; lungs
Atypical	:	Ugly dog; monster looking out at you; gaping open mouth; two catfish looking at evil;

Image 9

Typical	:	Kidneys; lungs; thorax
Atypical	:	Weight lifter (back pain detail); a bush with a spear for roots; brain; ovaries; Testicles; eyes; ears

Image 10

Typical : Lips, mouth (upper area) and Stomach (lower area)
Atypical : Non anatomical, Animal

Image 11

Typical : Intestine
Atypical : An animal

Image 12

Typical : Female sex organs (cervix, ovaries, uterus, vagina)
Atypical : Skull; top of hammer; dog with large ears

Image 13

Typical : Female genitalia, perineal area, buttocks, and heart
Atypical : An animal, creature from other space, leaf

Image 14

Typical : Vagina
Atypical : Stained glass window; crucifix (substituting religious symbolism); cave or tunnel; beetle; Indian oil lamp; eyes

Image 15

Typical : Spinal column
Atypical : "Mind block" (rape victim repressing male genital symbolism); pots, pans, or plates stacked on each other (neutralizing defense against phallic symbol by rape victim)

Image 16

Typical : Eyes, head, tongue, nose
Atypical : Bushy plant, Flower

Image 17

Typical : Spinal column, Rib cage, Pelvis, Phallus
Atypical : Indian lamp, big hammer

Image 18

Typical : Oral or Facial region, Crown
Atypical : Gate of Hell, Castle

Image 19

Typical : Two birds, Hands
Atypical : Butchered Animal, Dressed Chicken

Image 20

Typical : Face or part of face, Eyes
Atypical : Ghost, Fearful face

10. Rejection of Images (Rej)

If the subject is unable to give any response on any of the 20 cards, the response is considered as rejected. Verbalizations like spot or inkblot are not considered as responses, and are treated as Rejections. To determine the percentage of Rejection of Responses, 20 (total number of images shown) divides by the total number of rejected images, then that product is multiplied by one hundred. Rejection of images shows thought blockage and an inability to think properly.

11. Pathological Scales

Four pathological scales have been used (Cassell, 1980) for the evaluation of individuals. They are a) Pathologic Anatomy Scale (PAS); b) Depression (D); c) Hostility and Aggression Scale (HAS), and Paranoia Scale (P). Some of these are based on the work of Wayne Holtzman (1956). The scales are as follows:

a) Pathological Anatomy Scale (PAS*)*

Subjects who have personal health concerns, or who are pathologically identified with the health of others, may project responses in which the body is seen as diseased. These responses are usually related to specific regions involved in the subject's body image, and can be appraised by evaluating the qualitative nature of the somatic material projected. The anatomical imagery is similar to that described by De Vos (1952) in Rorschach responses involving "diseased anatomy."

Body parts might be reported as red, inflamed, infected or cancerous. Organs may be sore, painful or hurting. Passages may be blocked or obstructed. Bones may be out of place or broken. It is possible to assess pathologic anatomy by summing up all such responses. All of these responses are scored under PAS.

Individuals who project these responses should be further evaluated for either hypochondriac or excessive concern about physical health. This material should be explored, clarified and assessed in the detailed inquiry and follow-up interview, since the subject may still have unresolved anxiety about this alteration in body concept. The total number of such responses is counted to form a score for PAS.

b) Depression Scale (D)

A depressed subject's emotional state can be viewed as either overt or covert. Subjects with overt feelings of depression readily admit them, and are good reporters of their own mental state. They usually exhibit nonverbal behaviors, such as sighing, weeping, downcast eyes, etc., which are consistent with the experienced affect. Subjects in a state of masked depression often conceal or deny their feelings. Frequently, they are preoccupied with their bodies hypochondriacally, and project anatomical responses, which are likely to be pathological. A depressed mood can be assessed by inkblot responses with high morbid or depressive content. The severity of these thoughts and feelings can be assessed by a study of their frequency and content quality.

A four-point scale can be used to score the depressive content of inkblot imagery:

Score 0: No depressive content

Score 1: Slight or mild depressive content in the face of humans or animals (i.e. a sad face)

Score 2: Moderate depression associated with the "inkblot's" expression. An expression with a marked, or strong affect (e.g. a weeping person, a grief-stricken person)

Score 3: Sadness or depressed affect associated with an anatomical response. For example a heavy heart, a breaking heart, or a heart with a clamp on it. Something that is suicidal, or hanging from roof, or a dead man.

Individuals who are clinically depressed, but fail to recognize it, may have similar difficulty in recognizing content in the SIS. In the absence of neurological disorder, a high number of Rejection responses may signify masked depression.

c) Hostility and Aggression Scale (HAS)

Hostility and Aggression can be reflected in projective responses involving physical assault or body injury (Cassell, 1977, Cassell, et al,1998, 2001) and are scored as follows:

Score 1: Animals that are predatory or hostile to humans; an implement of aggression in a dormant state; a human or an animal that is seen as fierce, aggressive, or dangerous; a hostile attitude seen in humans or animals; references to bowel function or defecation with hostile content; a knife or a snake.

Score 2: Animals or humans seen as angry or in aggressive struggle, either verbal or physical; furious snakes; or abstract expressions of direct conflict or oral aggression.

Score 3: Homicidal scenes and/or anatomical responses involving body destruction. Subjects with histories of acting out hostile impulses have been found to project anatomical responses with murderous themes.

d) Paranoia Scale (P)

A cardinal projective feature of paranoid ideation involves a heightened awareness of threatening faces that are "looking" at the individual. This may be experienced as an exaggerated sense of self-consciousness in social situations. An emphasis on the eyes" of people or animals may be present in anxiety-laden dreams. It may be clinically indicated in art therapy, with figure drawings emphasizing "eyes." The patient may hallucinate about images of such staring faces. The paranoid scale quantifies such responses.

Clinical Considerations

Attention should be given to signs of somatic repression. This is reflected when images with high anatomical structure are left blank or when symbolic responses are projected, disguising the somatic content. An example is the response "Chinese pagoda" instead

of a spinal cord on Card 15. Another would be seeing a bush instead of kidneys or lungs on Card 9. Individuals suffering from psychogenic pain in a conversion disorder are examples of this group of respondents. In the detailed inquiry, depending on the clinical indications, specific questions may be asked to explore certain areas pertaining to the patient. What may at first seem an abnormal image pattern may prove to be a normal variant under the added scrutiny of detailed inquiry. The response may be a defense against painful reality, a temporarily focused but generalized anxiety or an acquired or learned response from family, job, school, life experience or long-term, chronic medical problems. The therapist should withhold judgment and not share it with the patient until the dynamics are clear. In classical analytic therapy, this delay is intentional and is an integral part of the treatment plan. The therapist waits until the patient has the insight, awareness and coping skills, and thus is ready to understand and process these new learnings. A subject's therapeutic readiness involves the ability to process affect-laden, repressed material, and unrealistic expectations of him/herself and others. Choosing this moment of truth, i.e. the time to share judgment, is a test of the therapist's knowledge, understanding and judgment.

Another line of inquiry concerning the determinants of SIS responses involves determining if the subject's projected material reflects inner psychological experiences not directly recorded from past visual experience. These responses may relate to nighttime dreams, daytime fantasies, or, in psychotic individuals, visual hallucinations.

Emphasis or sexual avoidance of a structure may suggest conflict in that area. Emphasis on eyes, ears, or hair may suggest paranoid ideation. A higher conformity to Most Typical responses may suggest that the patient or client have group conformity in his/her thought process. High scores on the four Pathological Scales may suggest pathology in the respective area. The greater the percentage of Atypical responses, the deeper the pathology.

Rejection of Images

It is equally important to understand why a person is unable to perceive on a particular image. Each image is created to depict a particular area, hence rejection of such images has lot of clinical significance. Since these inkblots are highly structured - in the absence of any organic pathology- inability to perceive a particular blot can be highly clinically significant. It may help, in understanding his reactions to different situations presented through inkblot imagery. The avoidance of such images may further be probed to understand the unconscious process. Though responses to different images are quite relevant to understand the personality of the subject but the rejection of images may be equally relevant and may help in peeping through of the inner self of the subject. Because of such relevance rejection, of images has been given much importance while interpreting SIS protocol of a subject.

When a person is unable to perceive images in a concrete form, it can be taken as rejection. It has been noticed that people reject images, which depict certain precept related to their traumatized experience or underlying painful memory. For example a

person having poor interpersonal relationship may reject Card 3 and 4, because these images project human content. Poor interpersonal relationship with spouse may also lead to rejection of Card 3, 4 and 14. Images like 14 projects more of erotic content. Since this area is disturbed because of poor relationship, people (he/she) may not feel like responding anything on this card. Similarly, it has been noticed on clinical sample of cardiac cases that persons suffering from heart problems rejects images depicting a heart - for example Card 2,7 and 9. A few patients who have recovered and have accepted their clinical problems bravely do perceive 'a heart' on these images. It suggests that they have no fear regarding their heart as they have been properly counseled. Persons suffering from body ailments, for example Kidney problems generally reject Card 9, which depict Kidneys. It has also been noticed that females traumatized sexually find it difficult to perceive Card 15 and 17, which generally project spinal column. The symbolic meaning of these images may relate to male sex organs. Since these persons have undergone traumatizing experience and have unpleasant memories of the precept, they may find it difficult to see anything on these images. Even if they perceive something, often they give poor quality responses and attach a special meaning to it. For example a patient who experienced an unpleasant sexual harassment perceived "A deadly android more like a creepy insect" on Card 15. It should be kept in mind that the material, which follows need to be, assimilated by the experienced clinician with the overall medical and psychiatric history data. Even certain contents from dreams and visual hallucinations may be included.

There are two types of interpretation of SIS responses - Clinical and Research. Whenever a protocol is to be interpreted for clinical purposes, interpretation of the images is essential. Whenever interpretation is required for research purposes, the total number of responses, percentages for Movement responses, Animal responses, Anatomical responses, Sex responses and Rejection of images need to be determined. The number of Atypical responses, Most Typical responses and Pathological responses is equally essential.

The SIS employs mainly two methods of interpretation:

1. **Quantitative Analysis:** Analysis of various indices, such as number of responses to images, number of human, anatomical, sex, and animal content; most typical, typical, atypical responses, movement and four categories of pathological responses have been created. These were established for evaluating a series of mental constructs in various normal and clinical groups. If the number of atypical responses and the rejection index, along with the total pathological score becomes elevated, then the prognosis is estimated to be more guarded (Cassell and Dubey, 1997, 1998,1999,2000,2001)

2. **Content Analysis:** Content analysis is given more emphasis in interpretation since it frequently helps to bring out the unprocessed unconscious material. What is seen through the response profile, along with the affect linkage, may have direct or symbolic significance either in the present or in the viewer's past. It is quite analogous to assessing such material as the in-depth study of dreams. While

the professional's own theoretical frame of reference will strongly influence the interpretative process, it is the authors, viewpoint that in most clinical therapeutic situations, content analysis for any given individual is a richer approach. For better understanding of the system a case of "Past Pain" is presented and the SIS responses are discussed in details:

Case 1: Past Pain

The case examines how SIS-I and SIS-II imagery project associations to past painful body events. The Rorschach test was also administered and the interpretation of the test is discussed in length. An internist for pain management referred an adult female. She had a history of severe recurrent migraine headaches. The referring physician was concerned about the analgesic medication (Demerol). It was his impression she was experiencing psychological stress from leaving her relatives in the "lower 48" and adapting to an Alaskan lifestyle. Her husband was employed in the oil industry and she had young children to care for through the long winters. When initially interviewed she related that her painful headaches indeed seemed worse since her recent move to Alaska. She denied mental problems. Mental status examination revealed an intelligent, middle-aged woman with some hysterical features but who was essentially intact. She showed no gross evidence of thought disorder and denied auditory hallucinations. Initial diagnostic impression was conversion hysteria with migraine headaches exacerbated by the stress of moving to Alaska. The treatment plan specified psychotherapy to improve coping skills and reduce stress and hypnotherapy for pain control.

She avoided the spinal content, instead seeing a "screw on top of an awl", disguised phallic symbolism. Moreover, she may have repressed the spine as well. She does not want to be independent and stand on her own two feet. An awl is a tool to make holes in leather or wood. Finally, near the top she projected another eye, perseverating this theme. For 17B she gave a normal response. On substituted "a wrench" her second association, "a carnivorous sea creature," reflected symbolically her negative view of phallic imagery. An oral aggressive quality is readily apparent. For 19B she saw "a sunny day or intense passion". This is a positive response associating the sun with warmth and emotion. She expresses herself as one who is capable of passion generally but not directly or overtly sexual, love more than sex.

For 20B, ordinarily seen as the brain, she saw "an atomic explosion." Her defensive symbolism served to repress her brain, an area she associated with her inner turmoil. An atomic explosion suggests the magnitude of her rage as in 18A. Her second level of imagery came closer to reality structure in that she saw " a wig on a Styrofoam headstand with a rose attached". She allowed herself to see a head but not a brain. Her dream content suggested some degree of splitting that subjectively noted her anxious brain fixation. Response to 4B evidenced a cognitive disorder. Her response to 21B was consistent with her aggressive feeling and previously detected catharsis of guns (12B). She saw "a gun that has exploded". For 22B she saw "a person dead in the middle of the road". It was consistent with the theme of body destruction and helplessness. On 23B, instead of seeing anatomical chest structure, she saw "a ladybug, she has broken

the rifle of a would-be killer." The response of a diminutive female figure (lady bug) with the power to break an attacker's rifle (phallus?) is strongly defensive symbolism. It reinforces the optimism and positive orientation of a rifle. On 24B she saw a "a curly mustache" and secondly "a two – headed snake." Her first response, to a masculine structure may symbolize her perpetrator. It may also symbolize the male genitalia, the moustache as pubic hair, the nose as penis. This seems likely since the next association was to a snake, a well-established phallic symbol. For 25B she saw "An eagle with a crystal body and snakes at the end of its wings trying to see the future in the crystal. It looks like a baby eagle". The baby eagle signifies regression. She lived at home and was never separated from her family. The snake imagery from 24B continues phallic imagery. Metaphorically this may be a variation of the Little Red Riding Hood theme of the virgin in the forest, a baby bird with the snake near at hand on its very wingtips. 27B evoked a typical response.

In the first hypnotherapy session, she proved to be an excellent subject. She was able to learn and apply relaxation techniques and imagery to reduce her headaches. Over the next several months there was a dramatic reduction in her pain and need for emergency room visits. However, as her treatment progressed, her case became much more complex. Following the first hypnotherapy session she recalled a long and traumatic period in her childhood involving sexual abuse by her father. She also became aware of post-amnestic episodes when she would suddenly find herself outside a bar dressed in provocative clothing. Eventually she reported being aware of voices in her head telling her to do socially unacceptable things. At that moment, her voice and behavior changed, adopting one of several multiple personalities. In one therapy session she suddenly spoke in a deep, threatening masculine voice as she assumed the identity of one of her early male abusers. Eventually, she recalled a history of terrifying child abuse in a religious cult where she said she witnessed human sacrifice, mutilation and the burning of babies. She was given the Rorschach followed by the 20-card of the SIS-I. Her Rorschach responses were:

I. "A face with eyes and nose. Part of this smile is covered by a black mask." Here content analysis revealed she has internalized the image of a masked man. Historically, this represented the male leader of the cult that abused her in childhood.

II "It's a face. Above the eyes are red figures. The head must be hurting. He is shouting out in pain." The person perceived represented a direct projection of one of her male altars personalities who experienced the painful headaches.

III "It's the figure of a person with long black arms. His head is split in two. The eyes are covered with dark sun shades". In this response sequence, she continued to project one of her male personalities. Seeing the "head split in two, is interpreted as a direct reference to the "splitting" intensity of her headaches at a somatic level. At a psychic level it reflects ego splitting one of her male personalities.

IV "Just a very dark looking mask." Here she was able only to see blackness with weak, undifferentiated mask-like form.

V "A butterfly. Black. Sad to see a butterfly all black." These are popular response but with added depressive content mirroring her own feelings of sadness and depression.

VI "Two persons sitting with backs turned against each other. Above their heads is another butterfly."

VII "Two elephant faces not looking at each other. Above their heads is another butterfly."

VIII "Two pink cats walking down. Blue butterfly with square wings".

IX "Two narrow eyes being hidden by pink, blue and orange masks. The eyes are sad. He wants out." The theme of a masked person recurs with added content suggesting depression and a wish to escape or relieve the depression. It represents one of her repressed personalities that is sad for lack of expression in her behavior. She responded in a brooding, threatening masculine voice.

X "Every object has a partner, two of everything." Aspects of the inkblot are personified and split in two.

Her responses to the 20 SIS-I cards:

1. "A spook with distorted eyes. Face of animal with eyes and horns. Red looks like birds". The spook represents the face of a past abuser. She was fearful of birds. In a phobic way she insisted upon the removal of a picture of an eagle from the interviewer's office.

2. "Somebody's head has been cut off. Somebody laughing, a get even type of laughter". She viewed a mutilation scene involving the motive of revenge. This is consistent with childhood cult abuse and certain of her murderous personalities.

3. "Two people. A man and a woman. The red blotches represent pain, close to the chest and heart, hurting pain". Her perception of the red central objects as pain close to the chest and heart represent a direct projection of her own conversion pain, related more to her chest than her head.

4. "A person, probably a male, and a red apple". She again projected male identification. For her, female body images were to be avoided because of their threatening association to her long childhood history of sexual abuse.

5. "A swimming turtle, two dots, little children and a heart." These are unremarkable responses.

6. "An animal trapped in an enclosure. They can't get out. A person standing on a heart. The reference to an animal trapped reflects a statement of how she feels when multiple personalities speak to her in her head.

7. "An animal sitting with feet. A llama. The heart is red. Some poor animal hurting". She projected her pain onto the image of the animal hurting.

8. “Seahorses. A rib cage and heart. A heart split in two instead of one." Her reference to the “heart split in two” described her own mental splitting.

9. “Two masses, inside, joined by something in common. The bottom looks like a knife.” She repressed the anatomical content because for her urogenital imagery is especially threatening. Her projection of the response “knife” is clinically significant. Prior to viewing the SIS image she had awakened from sleep on one occasion with a knife in her hand. She was completely unaware of how or why she picked it up. During this phase several of her personalities were both suicidal and homicidal.

10. “Lips, red running from lips. A snake.”

11. “Red colors”.

12. "Someone trapped in a red mask. Two faces on either side, one angry, the other dazed”. Her responses continued the theme of being trapped and masked. She projected anger onto one face and confusion on the other.

13 “A beetle chopping away”.

14. “A dark demon with two eyes” (top). A tiny cross at the bottom. A face with no eyes or eyebrows”. Because of her past sexual abuse she repressed vaginal imagery. Non-anatomical symbolism defended against this aspect of her self and involved negative connotations. The dark demon symbolizes certain of her personalities, which act out sexually. After such episode she would find herself standing out side a bar “dressed like a hooker” and be entirely amnesic about her sexual behavior. Another of her personalities was flirtatious and would attract a large following of men at cocktail parties.

15.“ Little faces staring up at each other. Eyes. The base support” (bottom). She repressed the spinal content because of the association of the spine with sexual activity during intercourse. Non-anatomical defensive material represents projecting of the faces of her multiple personalities.

16 “A face with two eyes and a nose”.

17. “A skeleton part. The vertebrae and pelvic area. There is also a face with white eyes and a mouth.” She added the comment: “I don’t like it. It makes me depressed.”

18. “Mountain cliffs and a man looking over people standing”. The people standing reflect her multiple personalities.

19. “Masks, carnival, Halloween.” The mask theme continues. She introduces the concept of Halloween, with implications of monsters, ghosts, frightening costumes, and a cult ritual holiday she may have associated with her traumatic child ritual abuse.

20. “The Devil himself, eyes and horns, the mouth wide open like he wants to say something or scream at someone.” One of her inner personalities represented the Devil. It was his screaming at her that frequently produced her headaches.

The Rorschach and 20-card SIS were later re-administered. The second Rorschach yielded these responses:

I. “Pumpkin face, Halloween type face. I like it. Feels like I’m being laughed at. A bad feeling of being watched. I see two birds on either side of a pumpkin face”. At this stage of therapy she was working through her incest trauma. The multiple personality disorder had not yet been diagnosed.

II. “Face of a man. Eyes are red, mouth white as if opened, tongue hanging out – it’s red”. Her responses again reflect a threatening man’s face. It was reasonable to postulate it represented the face of the perpetrator of her incest trauma, her father or other adult male cult members.

III. “Two female images each holding on to someone’s head. Looks as if they’re pulling on the head. Looks like a red heart or two hearts joined between the females. On each side of the female’s head are red falling objects, falling down.” She avoided male content, possibly defensively because of how males have been threatening to her. “Pulling on the head” may reflect past abuse or it could depict the psychic forces splitting her personality and figuratively pulling her head apart.

IV “At first I see a monster face coming towards me, black and scary. Next I see two boot-type shoes on either side of a common object. At this stage of her therapy, her multiples were closer to the surface. In the projective test situation she was unable to view the stimulus objectively.It became animated and moved towards her like in dream imagery. Her ego was less intact and she was moving into a border-line or psychotic position as the terrible extent of her past abuse was beginning to emerge. In retrospect, this brought to mind Freud’s original comments about analyzing a patient with hypochondriacal abdominal pains. When terrible problems come into consciousness he mused philosophically that it might be more humane not to pursue psychoanalysis and leave the patient with less physical suffering, the lesser of two evils.

V “Black butterfly, but I also see two objects joined in the middle each wanting to pull away." This represents a direct projection of her early splitting her terrible past from memory.

VI “The smaller object at top is having to pull the two larger objects on the bottom. Both of these two larger objects are joined in the middle by a common body. The object on top would like to be rid of his companions”. The theme of splitting continued with symbolic representation of the great psychic tension it causes.

VII “Two Indian type girls looking at each other. They each have one feather on their head. They are balancing on the edge of butterfly wings. They don’t want to be together.” The theme of splitting continued.

VIII “I see two pink rats walking over on three sets of objects or bodies. In the bottom object I see a scary yellow gold face.” The “set of bodies” reflects the early stage of her ego breaking into multiple personalities.

IX "I don't like this picture, it frightens me. It's all messed up like me." She acquired more insight into the extent of her past trauma and resultant psychopathology.

X "Everything in this picture is connected by some common link, I see different objects like two gray insect-type objects at the top looking angry at each other. Two blue spiders. Two Green seahorses. I see blue in the middle, a pelvic type skeleton. There is, however, in the middle an orange wishbone type object. Everything's very scattered." This response symbolized the anger and conflict between her inner psyche structures.

After taking the Rorschach she completed the 20-card SIS-Ifor the second time and these were her responses:

1. "Distorted face, twisted white eyes, crooked, two red hens, the face is sad." This response parallels her earlier response.

2. "I see red lips, laughing man at bottom holding his arms wide open. Looks like a bird flapping wings at top of picture." She failed to make a gestalt of the Inkblot configuration. The splitting reflected inner psychic fragmentation. The theme of being laughed at or tormented continued.

3. "Two objects, one man, the other female, red hearts in between the two, sharing." This response was more positive. The couple was sharing and there is less pain consistent with less conversion pain.

4. "Red apple at top, male figure at bottom, the male is smiling." She failed to recognize the female figure, consistent with a poor feminine identity and low self-esteem. She was more comfortable talking with men than women. As therapy progressed it became apparent her mother knew of the longstanding sexual abuse. She recalled hearing her mother's footsteps near her bedroom door when her father was abusing her.

5. "Looks like a black turtle with red heart, two infants on either side. The one on right is upside down. Two red dots above the turtle look like red eyes". She continued to euphorize her reaction to red color. Eyes are consistent with her paranoia.

6. "Bottom is a heart, red, with a red man walking on it. Two doves connected or trapped that can't get out or escape. Two reds on top are eyes looking at me." These responses projected two of her inner personalities seeking expression. The paranoid theme continued.

7. "Large red heart surrounding in the neck of a llama that's all dark." This response reflected her clinical improvement. At this stage of her therapy she experienced less physical pain and wasn't taking analgesic medication as frequently.

8 "Two dark seahorses eating on someone's heart." This response reflected the degree of suffering from her childhood history of abuse.

9. “Two bodies connected to a lower body with a knife at the end of lower body.” She repressed male imagery because of its threatening qualities. The knife relates to human sacrifice by the religious cult.
10. “Red lips at the top, blood running from lips onto a foreign object”. This represented more direct association to her emphasis on red.
11. “Looks like lower intestines, red, on fire, pain.” This reflected her long past history of lower gastrointestinal symptoms.”
12. This card evoked no response.
13. “In the center I see a black scary object looking at me.” This response associated with one of her internalized “bad” objects.
14. “A little girl in the center with arms open”. She repressed the female genitalia, the area of her past trauma. It showed age regression to the time of the incestuous abuse.
15. ‘Looks like stacks of bones, a spine?” She had less anxiety and identified the spine. Experience with a variety of clinical population suggests that there is less somatic repression and less conversation pain as a person focuses from body to psychic conflicts.
16. “Two faces, dog faces, sticking their tongues out at each other.” This symbolized aggressive feelings.
17. “Black atomic cloud with a sad face, with white in it.” This response reflected hostility and sadness.
18. “Scary face with mouth wide open.” This symbolizes a threatening internalized object.
19. “I see a face again with long eyebrows, mouth open, coming from behind two human type objects trying to hide.” Threat theme continued.
20. “This is also a scary, angry face, with mouth wide open. There is a wishbone above the head.” More of the threat theme.

Four years later she was again given the SIS-II booklet form. It was apparent that her headaches were not migraines but rather conversion phenomena arising from conflict between her various personalities and emergence of past traumas to full consciousness. Viewing certain SIS images precipitated and intensified her head pain. She saw 5A as “a monster with giant arms, a heart with a cloud above. It makes my head hurt and gives me an uncomfortable feeling.” On 10A she responded: “It makes my head hurt. It’s a face. I see eyes and it leaves me with a painful feeling.” For image 11B she projected “a nose with sinus pain”. She repressed the picture of the brain on 23B. Onto this painful region, which she perceived as the nerve center of her mental conflicts, she substituted “an atomic bomb explosion”. Symbolically this reflected her terrible past traumatic neurosis. Despite earlier brain repression, on 30B she saw “a brain divided up” directly associating her multiple personalities. Also relative to her multiple identities

was her response to 13A as “lots of hands reaching up for help” and 14A, “monsters fighting over a heart,” the effect of her destructive personalities. For 18A she saw “a skeleton skull with the devil inside, scary.” In a follow up interview, she recalled this was a direct projection of “the evil one”, one of her more powerful identities. On 24A, she saw “a group of people with arms connected”. In the detailed inquiry she related these to a group of five inner personalities who had gotten together to fight the evil one.

Some responses related to her trauma and sexual anxiety. Instead of seeing a woman on 7A she saw, “a man with an apple above his head. For 20A, depicting kidneys and male urogenital system, she repressed the male sexual content and saw instead “two Lima beans attached by a hair.” For the spinal picture in 23A she refused to respond and said only that she didn’t like what she saw. She related 14A to the ritual abuse by family members and others in the cult: “The fetus, someone killing the baby”. She saw 27A as “A cut-off breast”. A partial determinant of her response to 14A was that she tried to abort her youngest child at four months. This occurred after her father, in a jealous rage, told her he didn’t want her to be pregnant by anyone else. Some of her responses reflected somatic concerns about areas other than the head. To 28A she responded, “Muscle tendon in pain”. For 13B which depicts the female pelvis she saw “three growths on the stomach” referring to colitis. This involved excruciating recurrent abdominal pain with Diarrhoea. It felt like her “insides were on fire.” For 17B, which lacks somatic structure she saw “a heart” relating to palpitations, experienced when upset.

Interestingly, responses to the videotape version of SIS-II images accessed much earlier traumatic memories. 24B elicited memory of a burning baby. She recalled that as a child she witnessed cult ritual mutilation, murder, and burning of babies. The video evoked more painful somatic symptoms (headache) than SIS card or booklet versions or the Rorschach and was more psychologically threatening.

Conclusion

The SIS-I has been adopted in various countries and has English, Russian and Italian version. The new scoring system is simple and helps researchers and clinicians to find out the changes that have taken place before and after the therapeutic intervention. The new scoring system of the Somatic Inkblot series along with a case report is discussed in the paper.

References

Cassell,W.A.(1977) Aggressive Imagery and Clinical Symptoms in Schizophrenia, British J. of Proj.Techniques, 16:21-31

Cassell,W.A.(1980) Body Symbolism and the Somatic Inkblot Series. SIS Center, Anchorage(USA)

Cassell,W.A.(2001) SIS Exploration of Human Consciousness, SIS J. Proj. Psy. & Mental Health: 9:3-14.

Cassell, W.A. and Dubey, B.L.(1997) Somatic Inkblot Series Video/SIS-II Manual. SIS Center, 4501E, 104th Ave, Anchorage, AK-99516(USA).

Cassell, W.A, and Dubey, B.L.(1997) Therapeutic Dream Stimulation with SIS- Video, SIS J. Proj. Psy. & Mental Health, 1997, 4: 3-23

Cassell, W.A, Dubey, B.L.and Gilbert J.Roth (1997a) Medical, Psychological and Spiritual Application of the SIS Inkblots. SIS J. Proj. Psy. & Mental, Health, 4: 89-112

Cassell, W.A, and Dubey, B.L. (1998) Application of Somatic Inkblot Series in Personality Assessment, Screening, Diagnosis and Therapy, SIS J. Proj. Psy & Mental Health, 5:3-32.

Cassell, W.A, and Dubey, B.L.(1998) Mental Disorders Triggered by Exposure to Violent Imagery in the Media and in Electronic Games, SIS J.Proj.Psy & Mental Health ,5:87-104

Cassell, W.A; Dubey, B.L.; Molchanov, E. and Roth, L (1999) Stimulating Beacon Images for Meditation and Projective Psychotherapy, SIS J.Proj Psy. & Ment. Health, 1999, 6: (2) 7-30

Cassell, W.A; Dubey, A. and Dubey, B.L.(2000) SIS Projective Responses in PTSD and Dissociative Disorder, SIS J.Proj Psy. & Ment. Health, 2000, 7: 93-108

Cassell, W.A; Illardi, F.J.; A. Collins; Mishra, M. and Dubey, B.L (2001) Optimizing Spiritual Healing by Assessing Dream and SIS Imagery, SIS J.Proj Psy. & Ment. Health, 8:75-94

Cassell, W.A, and Dubey, B.L.(1996) The Use of the Rorschach and SIS in Releasing Somatised Grief. J. Proj. Psy. & Mental Health, 3: 3 -32

De Vos (1952) A Quantitative Approach to Affective Symbolism in Rorschach Responses, J. Proj.Tech and Personality Assessment,36:133-150

Dubey,B.L. and Cassell, W.A.(1993)Some Experiences with Somatic Inkblots-II, British J. of Proj.Psychology,38:,1,19-41

Dubey,B.L. and Cassell, W.A.(1997)Clinical Utility of Somatic Inkblot Series- Video. Perspective in Psychological Researches, 20:10-15

Dubey,B.L. and Cassell, W.A.(1997Application of Somatic Inkblot Series in Personality Assessment and Psychotherapy, Indian Journal of Psychology, 72:73-80

Dubey,B.L. and Cassell, W.A.(2000) Inkblot Responses as an Aide to Therapy, SIS J.Proj Psy. & Ment. Health, 7: 3-10

Dubey, B.L., Cassell, W.A, Pershad D. and Dwivedi,P.(1995) Diagnostic Utility of Somatic Inkblot Series. SIS J. Proj. Psy. & Mental Health,2: 77-84 .

Dubey, B.L., Cassell, W.A, Pershad, D and Dwivedi,P.(1995) Diagnostic Significance of the Indices of the SIS-II and the Rorschach Inkblot Tests. SIS J. Proj, Psy. & Mental Health, 2: 165-170 .

Dubey, B.L., Cassell, W.A, Dwivedi,P. and Mishra, M.(1995) Inner Cry Through Somatic Inkblot Series. J. of Proj. Psy. And Mental Health, 5, 2: 119-128

Holtzman,W.H.(1956)Inkblot Perception and Personality,University of Texax Press, Texas.

Kwiatkowska,H.Y.(1978)Family Therapy and Evaluation through Art. Springfield,IL, Charles C. Thomas.

Ulman,E.(1965) A New Use of Art in Psychiatric Diagnosis, Bulletin of Art Therapy, 4:91-116

SIS J. Proj. Psy. & Ment. Health (2002) 9 : 23-32

Profile of Militants : An Attempt to Study the Mind of Militants

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Thirty one militants who were evaluated through Somatic Inkblot Tests (Cassell, 1980; 1984) and personalized interviews were divided into hard core (67.74%) moderate core (22.58%) and soft core (19.68%) types. They were drawn from 8 recognized militant groups operating in the valley. 74.19% were below 30 years. 61.29% showed hostile and aggressive responses on SIS Test. Concordance rates between psychological (SIS) and intelligence reports were as high as 77.77%. Psychological stress was revealed only in 3.22 %. 67.74% were unlikely to benefit from rehabilitative measures. The usefulness of Somatic Inkblot Test in understanding militant psychology is discussed.

The manifestation of militant violence is protean like the ancient sea god Proteus and his constantly changing forms. The subcontinent now has a bewildering variety of militant organizations. Today they have become an almost inalienable part of the human situation. In a world frightened by highly disruptive episodes of collective violence, psychiatrists are asked so often to explain such deviant behavior. In developed countries, society also expects them to predict violence and to help prevent/contain it (Halleck 1980). It has become imperative for the psychiatrist to conceptualize the manner in which violence may be viewed as an aspect of emotional disorder. (Zitrin 1976, Sasowsky 1978). However violence is multidetermined. Biological, psychological and environmental (including socio political) factors play a role in the genesis of violent behaviour. Biological research has focused attention on a number of relevant parameters, which include aberrant cortical activity. However any form of violence may be viewed as a political act, and an attempt to attribute the same to an undergoing emotional disorder tends to negate political meaning of such violence (Halleck 1971).

No single theoretical framework can explain the phenomenology of violence. A simple economic principle. Postulates that, violence is likely to result when the perceived benefits of a violent action are greater than the perceived risk of violent action (Halleck 1980). While in deliberate professional crime, the risk benefit ratio may be evaluated at the conscious level. Unconscious mechanism too appear to be employed in many violent acts. The perpetrator of violence is not always a rational person, and quite often violence does not serve the interests of the violent person, who may be unable to make an accurate or adequate assessment of the risk benefit factor owing to impaired perception. Impairment of the reality function of the ego perhaps is the single most significant determinant in such a situation.

The benefits of violence, real or perceived are; (i) Gratification of emotional needs, (ii) Power and control over others (iii) Territory and wealth (iv) Relief from oppression and (v) Increased self-esteem (Meninger, 1963, Abel et al, 1977, Macdonald 1968, Sullivan 1970, Wolf gang 1961). Biological factors like, higher levels of androgens appear to be

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associated with increased rates of violence (Fields, 1975). Impaired cerebral function resulting in Organic Brain Syndrome (Ellicit , 1978) and drug intoxication often interferes with the individuals capacity to assess external reality and to evaluate the benefits of violence. The high correlation between alcoholic intoxication and violent behaviour is probably in large due to poor risk of perception. The impairment of the reality function thus appears to play a significant role in the genesis of violence.

It is in this background that a study was conceived to find out : (a)the unconscious aggressiveness and hostility that is directed towards the Nation in general (b) the mind set of the militants towards rehabilitation (c) predictability of the psychological tests vis-a- vis interrogation reports (d) to suggest possible remedial measures which may help in Anti-National Elements (ANE's) rehabilitation programme / indoctrinating.

Material and Methods

Material

The study was carried out at Srinagar, (Jammu & Kashmir) from Oct 93 to Oct 94.

1. 31 Militants who were confined to high security prison were taken into the study.
2. Cassell's somatic inkblot Series -I (20 cards) and Series II Video A and B (62 images) were used to measure their responses.

Methods

1. Militants at random in small groups of 5 to 6 were shown SIS series video Images A and B.
2. Those who completed the video test were given SIS series 1-20 cards and then the images were reviewed.
3. A brief psychological history was taken before subjecting the individual to a detailed assessment of the responses given. Their reaction towards the test and rejection of the images was noted.
4. Once the tests were completed the responses were tabulated to see the member of rejection of the cards SIS –I and SIS –II video images A and B on their responses, they were then classified into three groups as under :-

   Rejection of the cards SIS- Series-I, Series-II A & B core groups.

> 10 rejection of the cards in series I	> 15 (A)	> 15 B	HC
> 5 to < 10	> 10 < 15	> 10 < 15	MC
< 5	< 10 < 10		SC

5. Aggression & Hostility scales were used to find out the aggressive tendencies & their possible reaction towards rehabilitation.

Results and Observations

Total number of ANE's (Anti-National Elements)and the numbers analysed are shown in Table 1 & 2 i.e Their mean age was 28.35 with age range 18 to 68. 74 % were below the age of 30 years.

Table 1

Number of Mean of ANE Subjects

Total of ANE's in R & D center	:	89
No Volunteered for the tests	:	36
Tests completed	:	31
Drop outs	:	05
Mean age	:	28.35
Age Range	:	18 to 68 yrs

Table 2

Age Profile

	HC	MC	SC	Total	
20	08	-	01	09]	
					74.19%
21 – 30	08	05	01	14]	
31 – 40	02	02	-	04]	
					25.81%
41	03	02	01	04]	
Total	21	09	03	31	
Mean		28.6 years	27. 85 yrs	35.66 yrs	

Table –3 Shows the group affiliation. Majority who underwent psychometric tests were from HM group. Probably they made the largest group among the militants. (38.71%) No. of days in the R & D center ranged between 26 to 341 days within a mean of 149 days. Table 3 & 4 shows the group designation and type of militants. Majority of the hard core type belonged to HM, JKLF and Alzehad (64.52%).

Table 3

Group Affiliation of Militants

Group Affiliation	**:**	**(N= 31)**	
HM	:	12	(38.71%)
JKLF	:	05	(16.13%)
Alzehad	:	03	(9.68%)
JMJT	:	02	
Harkat Ul Ansar	:	01	
Jamait Islami	:	01	(35.48%)
MM	:	01	
Al Umar	:	01	
No group	:	05	

		31	

No of days of imprisonment , Mean 149 days, Range 26 – 341 days

Table 4

Groups Designation and Type (N=31)

		HC	**MC**	**SC**
HM	N = 12 (38.70%)	09	03	-
JKLF	N = 05 (16.13%)	04	-	01
Alzehad	N = 03 (9.68%)	03	-	-
Others	N = 11 (35.48%)	05	04	02

Table 5

Marital Status (N –31)

	HC	**MC**	**SC**
Unmarried 19 (61.29%)	14	03	02
Married 12 (38.71%)	07	04	01

HC = Hard Core, MC = Moderate Core SC = Soft Core

Their education level is shown in Table-6. 54.84 were below 9th standard, 38.71 % passed 10th standard and only 6.45% were graduates. 83.89 % were from large families. The family size ranged from 3 to 12 children (Table–7). Table-8 shows the level of motivation that is inherent in the groups. It is as high as 74.129%. 91.67% of HM militants belonged to the volunteer group which clearly shows their dedication to the militancy. Concordance rates (Table 9) between the intelligence reports and the psychometric tests is 77.77%. If one adds the MC group i.e 11.11 %, then the percentage rises to 88.88 % which is very significant.

Table 6

Education Level N = 31

	HC	MC	SC	Total
Illiterate	-	-	-	-
9th Std	13	02	02	17 (54.84%)
10th Std	06	05	01	12 (38.71%)
Graduates	02	-	-	02 (6.45%)
	21	07	03	31

Table 7

Family Size N = 31

	HC	MC	SC	Total
4 Sibs	02	02	01	05 (16.13%)
4 Sib & more	19	05	02	26 (83.89%)
Range 3 to 12				

Table 8

Level of Motivation

Groups	Volunteers	Non Volunteers
HM	11	01
JKLF	04	01
Alzehad	03	0
Others	05	06
Total	**23 (74.19%)**	**08 (25.81%)**

Table 9

Concordance Rate Between Psychological and Intelligence Reports

Psychological assessment done	N=31
Intelligence Reports made available	N=18
Concordance rate	N=14 (77.77 %)
Non Concordance	N= 04 (22.23 %)
MC can Switch to either side	N = 2 (11.11 %)

The militants show hostility and aggression during the psychometric tests in the form of hostile responses and sexual responses (Table –10 and 11). A significant number is in the HM group (66.67%).

Table10
Hostility and Aggression (N=31)

Scale	Total	HC	MC	SC
6 to 10	19 (61.29%)	14	04	01
3 to 5	09 (29.1%)	06	01	02
		01	02	-

Table 11
Hostility and Aggression Group wise

		06 to 10	03 to 05	0-03
HM	(N=12)	08 (66.67%)	02 (16.67%)	02 (16.67%)
JKLF	(N = 5)	02 (40%)	02 (40%)	01 (20%)
Alzehad	(N = 3)	03 (100%)	-	-
Others	(N= 11)	06 (54.56%)	05 (45.45%0	-
Total		19 (61.29%)	09 (29.03%)	03 (9.68%)

Table 12
Psychological Stress

	HM	JKLF	ALZEHAD	OTHERS
Severe	-	-	-	-
Moderate	-	-	-	-
Mild	-	-	-	01
Total (3.22%)	-	-	-	-

Table 13

Rehabilition (N= 31)

	HM	JKLF	Alzehad	Others	Total
Unlikely to benefit (64.74%)	09	04	03	05	= 21
Likely to benefit	03	01	-	06	= 10

Table 14

Drug Intake

Hard Core	(HC)	N	= 21	02
Moderate Core	(MS)	N	= 07	-
Soft core	(SC)	N	= 03	-
		Total	31	02 (6.45%)

It is strange that psychological stress is not seen contrary to expectations. It is as low as 3.22 %b (Table –12). The overall picture of psychometric analysis is reflected in the Table – 13 which shows those who are likely to benefit out of rehabilitation (i.e 32.25 %). Drugs don't seem to play a major role in violent acts with the present militants (Table – 14).

Discussion

When ever an individual is subjected to a psychological test the immediate reaction is one of non-cooperation. This is more so in the case of militants. A reliable method therefore had to be evolved to make the militants co-operate fully. To achieve this a distant psychometric analysis was undertaken. Cassell's Somatic Inkblot Test (Cassell, 1980) proved to be useful is assessing their psychological state. Somatic Inkblot images have proved that they can bring out the " inner cry " in an individual that is hidden not only from others but often from one's own conscious awareness. This is the unique, distinguishing feature of projective tests so elegantly demonstrated by the genius of Herman Rorschach and Cassell. The Inkblots bring to the fore whatever is buried in the mind closer to consciousness, which is accessible for processing and identifying the personal problems as well as mental disorders. By developing a practiced eye and ear for the imagery, a therapist can directly share the perceptual world of the patients with less interference, fewer variables than the structured interview of the so called " paper and pencil " test. If the saying goes 'A picture is worth a thousand words' Inkblots are picture recognition tests and are potentially more powerful than verbal interviews and tests. Rejection of the cards/images was taken as a guide, solely with the idea that an individual who is a militant is suspicious of the intention of the tester. Theoretical

constructs related to the unconscious, symbolism and the body ego is clearly brought out by the somatic inkblots tests. It is difficult to categorise each militant into a black or a white grade type (as done in intelligence reports) as there are some who do not fit in either of these two categories. There are few who fit in a middle group who can switch either to the black (hard core) or the white (soft core) variety. Group affiliation characteristics of militants clearly bring out three groups. They are :-

(a) Soft Core : Immature, Dependent, Aimless, Weak ego strength, Suggestible,Likely to breakdown if stressed. Uses gun as a phallic symbol, Increased self esteem through illusion of power.

(b) Moderate Core : Emotionally labile, Fantasizing, Romantic, Dependent, Yarning for martyrdom, Rationalizes his acts because of weak ago.

(c) Hard Core : Impaired ego, Sociopathic, Hard to Moderate, Fighting for a cause, Power hungry.

Cassell's Inkblot Test helped to delineate the militants into the three groups. This was done solely on the number of rejection of the cards/images and the No. of hostile responses given on the cards (series I & II) If the number of cards/images rejection were more than 45 out of 82, they were designated as hard core type and those between 35 to 45 were grouped into moderate group, the remaining belonged to soft core type. These were later compared with intelligence reports that had designated each militant into a black (Hard core) and a white (Soft- core) category. The concordant rates were high as 77.77% (Table–9). Hostility can be reflected in projective responses involving physical assault or body injury. The hostility aggression scale is a four –point scale similar to that of Holtzman (1956). This has been used in the current study (Table 10 and 11). The number of sexual responses given by the individuals also supplements it. There is a relationship between sexual and aggressive behaviour and this in most apparent in animals. Neurophysiologically the relationship can be explained by the fact that stimulation of certain areas of the brain causes penile erection and aggressive behaviours (Cassell 1980). For the human male in contemporary society, any such social or sexual behaviour will lead to very serious problems. Suppressed aggressiveness comes to the core in the projective imagery through the SIS. Over all the hostility and aggression in the imprisoned militants is shown to be 61.29 % (Table-11). Table-10 shows that 4/7 and 1/3 moderate and soft core showed significant hostile aggressive responses. It can be predicted that these five (5) militants can switch over to hard core type given the chances (i.e Black type). In similar terms one of the hard core may eventually turn out to be a moderate or soft – core.

It is not necessarily true that every individual who is confined to a cell shows mental distress. The fact that only 3.22% showed such mental distress indicates that they are contented with the treatment given by the armed forces. It also shows that they have faith in the system that they will be released. This is a fact, which was brought out in the personalized interviews.

This study brought out the following relevant facts.

(a) Unemployment & corruption are the driving force behind militancy.

(b) Majority of the militants are young below the age of 30 yrs unmarried, under matric, came from a poor socio-economic status and large families.

(c) Militants are not psychologically distressed in captivity.

(d) Psychological indoctrination following their induction is very good, hence they are unlikely to benefit from rehabilitation measures (67.74%).

(e) Most of them talked about corruption, the rich having gotten richer and they having been denied their dues. The gun is found to be emotionally and financially gratfying, as it gives power and relief from oppression. Unlike the foreign mercenaries, fired by Islam who call themselves “holy warriors” , the interviews and the tests showed that religion is not high on the list of motivating factors.

(f) Family background shows majority are under matric (54.84%) and with larger families (*3.89%). This has lead to a feeling of being under privileged. The gun has become the compensation mechanism for these. From the manner in which they admitted to killings/involvement in violent acts in interviews, it is clear that they enjoyed the taste of blood/power.

(g) Psychological indoctrination, which is shown by motivation factor i.e 74.19% is a matter to be taken note of (23/31). Admitted hardened by violence and criminal activity, indicated militancy had become a profession they were pursuing with zeal. They found more emotional bonding within the militant gangs rather than their families, in the event of their getting arrested or killed.

(h) Alienation factor plays an important role in militancy. This is more so due to the attitude shown by para military forces as revealed by some militants. For them the security forces remain the aggressor or tormentor. People being hostile towards security forces to some extent, this serves as a great morale boost to the militants to continue their Terrorist acts.

(i) Unemployment seems to be the bane of violence as reflected by the level of education and young age of the militants.

(j) Drugs in effect do not play a significant role in perpetuation of violence as is led to believe.

(k) The success rate of delineating a terrorist into a black and white is 77.77%. This is significant.

(l) Psychometric tests can throw light on various grades of militants.

(m) The average Kashmeri militant does not consider himself a holy warrior i.e religion is not an important motivating factor.

(n) The gun is primarily seen as a weapon to fight a corrupt system.

(o) Financial hardship is a major consideration since militant organization look after the families of those arrested or killed.

(p) The Pakistan trained militants are far more hard core than those trained locally.

(q) Family ties have become irrelevant since these men seen to find more emotional bonding within the militant fold.

Conclusion

To date clinicians and behavioral scientists have had very little success in predicting future criminal or assaultive behaviour's based on either experience or psychological tests. There appears to be a pressing need for a new assessment technique to improve the predictive aspect of psychiatric and psychological assessment. Somatic ink blots tests used in this study appears to contribute in this direction.

Reference

Able, G.C., Barlow, D.H., Blanchard, E.B. and Guild, D, (1977) The Components of Rapist's Sexual Arousal, General Psychiatry.

Cassell, W.A., (1980) Body Symbolism and the Somatic Inkblot Series, Ed I. Aurora publishing Co., 213 West Sixth Avenue suite 8 Anchorage, Alska 99501.

Cassell, W.A., (1984) SIS-II Video Test. SIS Center, 4501E, 104th Ave, Anchorage, AK99516 (USA).

Ellicit, T.A. (1978) , Neurolgical Factors in Behaviour, Violence and Responsibility, Sadoff R Editor, Spectrum, New York,. p 50.

Fields, W.S. and Sweel W H, (1975) Neural Basis of Violence and Aggression. Warren & Green ,St Louis.

Halleck, S. (1980) Social Violence and Aggression, Comprehensive Text book of Psychiatry . Kaplan HI Freidman AM, Saddock BJ, Editors Willimas & Wilkins Baltimore, p 3149-3154.

Halleck, S. L., (1971) Politics of Therapy. Science House, New York.

Holtzman, W.H. (1956) Inkblot Perception and Personality, University of Texas Press, quoted in Body Symbolism by Cassell W A Capter 8 Aggression p 127-128.

Mac Donald, J. (1968) Psychiatry and the Criminal, Charles C Thomas Springefield, Illinois.

Meninger, K. A. (1963) The Vital Balance, Viking Press, New York.

Sasowsky, L. (1978) Crime and Violence among Mental Patients Reconsidered. American Journal of Psychiatry 33: 135.

Sullivan, R.T., (1970) The Economics of Crime An introduction to Literature, Crime and Delinquency, 138 P 23.

Wedge, B. (1976) Psychiatry and International Affairs, Science,77 p 157.

Wolfgang, M.E., Ferracuti. F. (1961) The Subculture of Violence, Aldine Publishing CO, Chicago.

Zitrin, A., Hardesty, A.S. and Burdock, B.L., (1976) Crime and Violence among Mental Patients. American Journal of Psychiatry, 33 : 133-142

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Somatic Inkblot Series -I : A Meta Analysis

Ajay K. Srivastava

The findings of the studies on SIS-I was meta analysed with the aim to provide normative data by combining mean and standard deviations of existing studies and to see if SIS-I indices can differentiate various groups. All the studies published in SIS Journal of Projective Psychology and Mental Health from 1994-2001 (January) were considered for the present study. the studies were pulled into four groups on specific inclusion criteria : Normals, Coronary Heart Disease, Generalised Anxiety Disorder and Schizophrenia. Critical ratio were computed on combined mean and standard deviation for intergroup comparison. The results revealed that the SIS-I indices significantly differentiate the comparison groups.

Projective test came into existance in 1921 in the form of inkblot tests as a result of Rorschach's innovative efforts. Inkblot is an important projective test being used all over the world by professionals for psychodiagnostic purposes. As an extension of traditional inkblot technique, Cassell (1959) developed Somatic Inkblot Series (SIS). Five forms of the SIS test are available : SIS-I (20 cards set), SIS-II (62 images booklet), SIS-video, SIS-I video and SIS living images.

There are many reports reflecting its diagnostic and therapeutic efficacy and clinical significance in understanding the problems of the individuals. Normative data have been prepared for different version of SIS. A review of literature revealed that SIS-I was the least preference among the researchers as compared to SIS-II.

Fourteen studies on SIS-I appeared in SIS Journal of Projective Psychology and Mental Health since its inception. The details of the studies are given in Table-1.

It is evident from the table that some are case reports and some studies have been done on small samples. Most of the studies have compared two groups. The present study have been planned with following objectives :

Objectives

i) To provide normative data on SIS-I indices by combining mean and standard deviation of existing studies across groups.

ii) To compare the combind mean and standard deviation to see if SIS-I indices can differentiate various groups.

Method

In 14 studies on SIS-I about 28 groups have been studied. Some of the groups are common in the studies. Out of 28 groups 9 were selected for meta analysis on the basis of following inclusion criteria :

1. Specification of global / specific diagnostic entity for clinical groups.
2. Large sample size after pooling the studies for an entity.
3. Availability of mean and standard deviation and
4. Studies on adults only.

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Table 1

Details of Studies on SIS-I Published in SIS Journal of Projective Psychology and Mental Health from 1994-2001 (January).

Sr. No.	Authors	Year	Page No.	Groups Studied	N	Whether Reported Mean	Whether Reported SD	Code
1.	Rathee, Goel Chawala, Saldanha & Dubey	1994	51	Coronary Cases	75	Yes	Yes	B
				Normal Adult	75	Yes	Yes	A
2.	Sahay and Srivastava	1994	73	Male Transexual	2	No	No	R
3.	Mukhopadhya, Bannerjee & Mishra	1996	33	Heroin Addict	22	Yes	No	R
				Brown Sugar Addict	16	Yes	No	R
				Tidigesic Addict	12	yes	No	R
4.	Rathee and Singh	1996	43	Male normal with Army background	35	No	No	R
				Famale Normal with Army background	40	No	No	R
5.	Mitra and Mukhopadhya	1996	153	Heroin Addict	19	No	No	R
				B. Sugar Addict	12	No	No	R
				Tidigesic Addict	9	No	No	R
6.	Cassell & Dubey	1998	87	Psychiatric Case	1	No	No	R
7.	Sguazzin Cinzia & Ferro Roberto	1998	105	Females with obesity	35	No	No	R
8.	Banerjee, Mukhopadhya & Singh	1998	33	Heroin Addict	15	Yes	Yes	R
				Normal	15	Yes	Yes	A
9.	Khromov, Cassell & Dubey	1999	29	Normal Russian Female	91	Yes	Yes	A
				Normal American Male	168	Yes	Yes	A
10.	Sarkar, Rathee & Neena	1999	69	Generalised Anxiety Disorder	50	Yes	Yes	C
11.	Mitra & Mukhopadhyay	2000	53	Drug Addict	247	% Mean	% SD	R
				Normals	48	% Mean	% SD	R
12.	Paola Nicolini	2000	127	Migrain	16	No	No	R
				Tensive Cephalgia	16	No	No	R
				Normal	16	No	No	R
13.	Kumar, Singh & Mohanty	2001	31	Schizophrenics	32	Yes	Yes	D
				Normal	32	Yes	Yes	A
14.	Khromov	2001	53	Achondroplasia	19	Yes	Yes	R
				Traumatically Shortened extremties	18	Yes	Yes	R
				Normal	95	Yes	Yes	A

Code : A, B, C and D are included in meta analysis.

R = Rejected
A = Normals
B = Coronary Case
C = Generalised Anxiety Disorder
D = Schizophrenia
N = Sample Size

Table 2

Combined Mean and SD on SIS Indices among Different Groups

Indices	A Normal Mean	SD	N	B Coronary Heart Disease Mean	SD	N	C Generalised Anxiety Mena	SD	N	D Schizophrenics Mean	SD	N	Highest to Lowest order
1. Total Response	27.55	7.10	293	23.18	4.81	75	20.50	7.16	50	20.00	3.57	32	ABCD
2. Movement	5.41	5.46	281	--	--	--	--	--	--	1.03	1.38	32	AD--
3. Human	4.71	3.14	308	3.26	1.80	75	3.98	1.93	50	3.66	3.48	32	ACDB
4. Animal	7.42	4.89	308	4.10	2.02	75	5.32	3.76	50	5.78	3.43	32	ADCB
5. Anatomy	8.69	6.39	308	6.02	2.45	75	5.30	3.97	50	3.31	3.38	32	ABCD
6. Sex	1.70	1.90	308	1.72	1.31	75	2.36	3.21	50	0.19	0.53	32	CBDA
7. Rejection of images	2.41	2.85	217	4.25	2.06	75	4.90	3.68	50	2.44	2.46	32	CBDA
8. Most Typical	7.66	6.97	233	--	--	--	--	--	--	1.47	1.44	32	AD--
9. Typical	16.56	5.41	32	--	--	--	8.76	4.09	50	10.97	3.42	32	ADC--
10. Atypical	6.63	3.77	233	--	--	-	--	--	--	7.56	4.26	32	DA--

Table 3

Comparision of Different Groups on SIS-I Indices

Indices	Normal Vs CHD (A vs B)	Normal Vs GAD (A Vs C)	Normal Vs Schizo (A Vs D)	CHD Vs GAD (B Vs C)	CHD Vs Schizo (B Vs D)	GAD Vs Schizo (C Vs D)
Total Response	6.33*	5.88*	10.07*	2.31*	3.79*	0.42
Movement	--	--	9.73*	--	--	--
Human	5.37*	2.28*	1.64	2.14*	0.62	0.75
Animal	8.97*	3.50*	2.45*	2.10*	2.58**	0.58
Anatomy	5.80*	5.06*	7.69*	1.14	4.11*	2.43**
Sex	0.11	1.40	10.79*	1.33	9.00*	4.62*
Rejection of Image	5.94*	4.53*	0.06	1.12	1.62	3.62*
Most Typical	--	--	11.90*	--	--	--
Typical	--	6.61*	4.95*	--	--	2.66*
Atypical	--	--	1.18	--	--	--

The groups with code No. A, B, C & D (Table-1) were included in the analysis and the groups with code No. R were rejected. The groups meeting inclusion criteria were pooled into four groups (1) Normal (Code A), (2) Coronary heart Disease (Code B), (3) Generalised Anxiety Disorder (Code C), and (4) Schizophrenics (Code D).

For analysis, combined mean and standard deviation of the groups were computed applying formula No. 3 and 17 respectively reported in Garret (1966).

For intergroups comparison, critical Ratios were computed on the combined mean and standard deviation.

Results and Discussion

The combined means and standard deviations of different indices of SIS-I have been presented in Table-2. The results of different indices among various comparison groups are given in Table-3.

It is observed from table-3 that most of the SIS-I indices differentiated various comparison groups. It indicates that each individual indice is potent in discriminating the groups. Some of the studies did not report normative data for typical, atypical, most typical and movement responses. These indices are essential for exploring important characteristics of the different diagnostic entities. It is suggested that researchers in future must incorporate the data on these indices. The results of analysis reflects that there is need for normative data on different disease entites on larger sample. Statistically significant indices of SIS-I differentiating various comparison groups are elaborated in Table IV for ready reference.

Table 4

Significant SIS-I Indices in Comparision Groups

Comparison Groups	Indices
Normal Vs Coronary Disease	Total Response, Human, Animal, Anatomy and Image Rejection
Normal Vs Generalised Anxiety Disorder	Total Response, Human, Animal, Anatomy, Image Rejection, Typical
Normal Vs Schizophrenic	Total Response, Movement, Animal, Anatomy, Sex, Most Typical, Typical
Coronary Disease Vs Generalized Anxiety Disorder	Total Response, Human, Animal
Coronary Disease Vs Schizophrenia	Total Response, Animal, Anatomy, Sex
Generalised Anxiety Disorder Vs Schizophrenia	Anatomy, Sex, Image Rejection, Typical

Conclusion

The results of meta analysis of different groups clearly indicate that SIS-I can be safely used as a diagnostic tool. It is suggested that more psychiatric disease entities should be studied so that the data may be available for the use of professional in the field.

Reference

SIS J. Proj. Psy. & Ment. Health Issues. Vol. 1-8 (1994-2001)

Garrett, H.E. (1966) : Statistics in Psychology and Education. Bombay : Vakils, Febber & Simons Ltd.

SIS J. Proj. Psy. & Ment. Health (2002) 9 : 38-48

Diagnostic Value of SIS-II Among Sub-Groups of Psychotic and Neurotic Patients of Armed Forces.

S. P. Rathee, P.K. Pardal and T. R. John

The present study intends to assess the diagnostic value of Somatic Inkblot Series-II (SIS-II) among sub groups of psychotic and neurotic patients. The SIS-II was administered on each patient individually, following the standard procedures (Cassell and Dubey, 1997). The findings reveal that total number of Responses; Atypical and Pathological responses were able to discriminate among subgroups of Psychotics. Likewise, R, MT, Atypical, Movement, Rejection of Images Human, Animal and Sex responses were able to discriminate among subgroups of Neurotics. The Test Comments of both groups of psychotics and neurotics proved to be more useful to understand their underlying psychopathology. The patients with less disturbances liked the test and felt comfortable while reacting upon it's images, as compared to patients with more disturbances. The SIS Profile can provide a lot of help in diagnosis of various categories of psychosis and neurosis.

The diagnostic and clinical utility of Somatic Inkblot Series among psychiatric and non-psychiatric patients and normal subjects have been found very high in various studies (Rathee, et.al., 1995, Dubey, et. al., 1995a).But there are very few studies, where patients suffering from sub-group of Psychosis i.e. Schizophrenia, Affective Psychosis, Paranoid states, Alcoholic Psychosis and Drug Psychosis and Neurosis like Anxiety, Depression and Dissociative Reaction, etc. have been compared. However, few studies have included some major groups like Schizophrenia, Depression, Obsessive Compulsive Disorder and Anxiety (Cassell, 1977; Dubey,1995; Mishra, 1995). There is hardly any study, which has included other groups like Affective Psychosis, Un-specified Psychosis in addition to Schizophrenia in Psychosis and Dissociative Reaction and Anxiety state in Neurosis. Considering the felt need and paucity of such research work particularly in military set-up, the present study was initiated to assess the diagnostic value of Somatic Inkblot Series –II among these sub groups of Psychosis and Neurosis. The present study was planned:

1. To find out the diagnostic value of Somatic profile of SIS -II among three sub groups of Psychosis i.e. Schizophrenia, Affective Psychosis and Un-specified Psychosis.
2. To find out the diagnostic value of Somatic profile of SIS –II among three sub groups of Neurosis i.e. Anxiety State, Depression and Dissociative Reaction.

Material and Method

The present study consists of 200 patients, 100 each of Psychosis and Neurosis. They were further divided into 3 groups of Psychosis viz Schizophrenia (30) Un-Specified Psychosis (30) and Affective Psychosis (40) and 3 groups of Neurosis viz. Anxiety (30) Depression (30) and Dissociative Reaction (40). They were in the age range of 20 – 50

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years, educated from Middle standard to Graduation level. They were belonging to the ranks of Sepoy to Officer. All of them were fresh and symptomatic cases diagnosed by Psychiatrist, following a standard criterion in vogue. The Psychiatrist initially examined the psychiatric patients satisfying the inclusion criteria. The need and objectives of study were informed. The patients who were found fully co-operative under present conditions were administered SIS-II individually, following standard procedures of administration.(Cassell and Dubey, 1997). The SIS-II protocols were scored on four main categories which were (i) Quality of response, consisting of total Responses, Most Typical, Typical, Atypical, Pathological, Movement responses and Rejection of images (7), (ii) Contents of responses consisting Human, Animals and Sex (4), (iii) Pathological responses which were scored on four rating scales, (a) Pathological Anatomy Scale (b) Hostility Aggression scale (C)

Depression Scale and (d) Paranoia Scale (4). (iv) The last category was consisting of Test Comments (a) three images liked the most, (b) three images liked the least (c) perception of the test and (d) feeling after completion of the test (4).

Statistical Analysis

The Mean and SD of each categories of SIS-II were calculated along with, then percentages of each variable (out of total number of responses). The significance of mean difference was done using CR values of each categories of SIS-II among three sub groups of Psychosis and Neurosis. The results thus obtained are discussed in the paper.

Results and Discussion

Part - A

After scoring of SIS-II protocols of three sub groups of Psychosis and Neurosis on the basis of four major categories i.e. quality of responses (7), contents (4), pathological responses (4) and test comments (4). Their significance of mean difference was seen on the basis of their CR values (t- test) on each variable. The obtained results are shown and discussed ahead.

Table I reveals that out of 7 quality of response variables, three were found to discriminate the patients of three groups significantly. The patients suffering from active psychosis were found to give more number of responses (M =61.65) as compared to those of Un-Specified Psychosis; however, most of their responses (26.11%) were atypical in nature, as compared to other two groups i.e. Schizophrenia and Un-Specified Psychosis (18.4 and 18.07 % respectively). The 'pathological' kinds of responses were observed to be hardcore indicators, which could discriminate among three groups. In fact, these patients being much away (psychologically) from their normal counterparts produced more of pathological responses due to their behavior pathology. The psychiatric patients have been seen to produces low number of responses due to their disturbed somatic awareness and social withdrawal. The findings are confirmatory to previous observations (Dubey and Cassell,1993; Rathee, et. al., 1995; Kumar, et. al., 2001).

Table 1

Significance of Mean Difference of Quality of Responses among Three Sub - Groups of Psychosis :

Quality of Responses		Schizo-phrenia (n: 30) A	%	Affective Psychosis (n: 40) B	%	Un-Specified Psychosis (n: 30) C	%	CR-Values
Total	M	50.20		61.65		52.8		A&B : 1.43
Responses								B&C : 2.29*
	SD	15.98		15.36		16.4		C&A : 0.81
Most	M	10.33		10.87		11.66		A&B : 0.69
Typical			(18.38)		(17.63)		(22.09)	B&C : 0.97
Responses	SD	3.21		3.30		3.41		C&A : 1.55
Typical	M	17.4		20.6		20.46		A&B : 1.64
Responses			(30.96)		(33.41)		(38.15)	B&C : .21
	SD	8.04		8.15		7.74		C&A : 1.65
Atypical	M	10.33		16.1		9.54		A&B : 4.43**
Responses			(18.4)		(26.11)		(18.07)	B&C :6.20**
	SD	6.37		3.76		4.8		C&A : 0.54
Path.	M	7.93		5.7		4.26		A&B :3.50**
Responses			(14.12)		(9.24)		(9.22)	B&C : 2.71**
	SD	2.82		2.39		2.06		C&A :5.76**
Movement	M	4.26		4.60		3.23		A&B : 0.04
Responses			(7.58)		(7.46)		(6.12)	B&C : 1.34
	SD	3.26		3.35		4.57		C&A : 1.00
Rejection	M	12.2		11.45		14.3		A&B : 0.72
of images			(19.68)		(18.47)		(23.06)	B&C : 0.92
	SD	12.2		9.94		14.5		C&A : 0.61

** CR values significant at .01 level , * CR values significant at .05 level.

Percentages are from total number of responses and images.

Table 2 reveals the diagnostic significance of contents of responses on SIS-II. It can be observed that out of 4. Human and Animal contents were found to discriminate among the three groups of Neurosis. The normal subjects tend to see more of Most Typical, Typical, Human, Anatomical and Sex responses. Since, psychiatric patients are mentally disturbed and keeping unhealthy interpersonal relations they have given low number of Most Typical and Human responses.

Table 2

Significance of Mean Difference of Contents of Responses among Three Sub Groups of Psychosis :

Contents of Responses		Schizo-phrenia (n: 30) A	%	Affective Psychosis (n: 40) B	%	Un-Specified Psychosis (n: 30) C	%	CR-Values
Human	M	16.8		17.76		16.9		A&B : 0.51
			(29.89)		(28.80)		(32.0)	B&C : 0.42
	SD	6.0		9.65		7.35		C&A : 0.05
Animal	M	6.4		6.65		6.56		A&B : 0.22
			(11.39)		(14.03)		(12.42)	B&C : 0.08
	SD	4.4		3.84		4.95		C&A : 0.13
Anatomy	M	7.16		8.65		9.23		A&B : 0.30
			(16.3)		(14.03)		(17.48)	B&C : 0.37
	SD	7.13		6.44		6.45		C&A : 0.04
Sex	M	1.46		1.57		1.83		A&B : 0.13
			(2.60)		(2.55)		(3.46)	B&C : 0.34
	SD	2.58		4.12		2.18		C&A : 0.60

Table 3

Significance of Mean Difference of Pathological Contents of Responses among Three Sub Groups of Psychosis :

Path Contents Rating Scales		Schizo-phrenia (n: 30) A	%	Affective Psychosis (n: 40) B	%	Un-Specified Psychosis (n: 30) C	%	CR-Values
PAS	M	3.33		2.4		2 .43		A&B : 0.63
			(5.92)		(3.89)		(4.6)	B&C: 0.03
	SD	2.08		3.5		3.74		C&A: 0.63
HAS	M	0.73		0.85		0.06		A&B: 0.3
			(1.30)		(1.38)		(0.11)	B&C: 0.13
	SD	1.53		1.81		0.9		C&A: 0.75
D	M	2.13		1.3		1.23		A&B: 1.60
			(3.79)		(2.11)		(2.33)	B&C: 0.16
	SD	2.37		1.83		1.7		C&A: 1.70
P	M	1.73		1.15		0.53		A&B: 1.26
			(3.08)		(1.86)		(1.0)	B&C: 1.94
	SD	2.02		1.78		0.9		C&A: 2.97**

Table 3 reveals the differentiating capacity of pathological contents rating scales among three groups of psychosis. No clear cut difference was observed among their pathological thoughts except that patients of schizophrenia showed more of paranoid type disturbances (3.08%) as compared to Unspecified psychosis (1.07%), which is confirmatory to previous observations (Cassell, 1977; Cleveland, 1960, Dubey, et. al.,1982, Rathee, 1996) .

Table 4

Significance of Test Comments among Three Sub Groups of Psychosis:

Test Comments (A)	Image & Remark %	Schizo-phrenia (n : 30)		Images & Remarks (B)	Affective Psychosis (n : 40)		Images & Remarks	Unspecified Psychosis (n : 30) (C)	%	Com-ments
Three	5B	11	36.6	31B	16	40.0	5B	14	46.6	Three
Images	31A	7	23.3	5B	15	37.5	31B	11	36.6	groups
Mostliked	31B	5	16.6	29B	12	30.0	29B	6	20.0	differ
Three	12B	4	13.3	30A&13A	13	32.5	30A	6	20.0	Three
Images	7	3	10.0	24A & 2B	6	15.0	19B	5	16.6	groups
Least liked	14	2	6.6	22B	5	12.5	10A&13A	4	13.3	differ
Percep-	Positive	23	76.6	Positive	29	72.5	Positive	22	73.3	Three
tion of	Negative	5	16.6	Negative	9	22.5	Negative	7	23.3	groups
Test	Neutral	2	6.6	Neutral	2	6.6	Neutral	1	3.3	differ
Feeling	Positive	17	56.6	Positive	28	70.0	Positive	17	56.6	Three
After	Negative	12	40.0	Negative	8	20.0	Negative	12	40.0	groups
Testing	Neutral	1	3.3	Neutral	4	10.0	Neutral	1	3.3	differ

Table 4 reveals the diagnostic significance of test comments on SIS-II, the test comments in fact, is the first step towards analysis of SIS-II protocol and psychopathology of the patient (Cassell 1980). It can be seen that patients of three sub groups preferred the 'Human oriented' images (31A, 5B, 31B) showing interest in other persons. But the vast difference was observed on least liked images, which can be seen on the table itself. More than 70% subjects from Affective Psychosis liked the test very much and felt comfortable where as the same was less among schizophrenics and unspecified psychosis (56% in both groups) . The further investigations in the test comments could add more diagnostic help and to understand their inner cry for help.

Part - B

Table 5

Significance of Mean Difference of Quality of Responses among Three Sub Groups of Neurosis :

Quality of Responses		Anxiety (n : 30) (A)	%	Depression (n : 30) (B)	%	Dissociative Reaction (n : 40) (C)	%	Level of sig. CR – Values
Total	M	51. 0		47. 56		60. 57		A&B : 1.5
Responses								B&C : 5.10**
	SD	12. 22		10. 80		10. 31		C&A : 3.46**
Most	M	11 .5		10. 66		12. 25		A&B : 0.98
Typical			(22. 56)		(22. 44)		(20. 23)	B&C :1.96*
Responses	SD	3. 39		3. 26		3. 5		C&A : 0.90
Typical	M	21.46		19. 6		21. 37		A&B : 1.0
Responses			(42. 08)		(41. 23)		(35. 29)	B&C : 1.22
	SD	8. 17		6. 14		5.71		C&A : 0.51
Atypical M	M	10.06		8.43		14. 1		A&B : 1.35
Responses			(20. 78)		(17. 73)		(23. 29)	B&C : 4.10**
	SD	6. 17		6. 25		4. 44		C&A : 2.58**
Patho.	M	3. 99		4. 2		4. 27		A&B : 0.29
Responses			(7. 78)		(8. 83)		(7. 06)	B&C : 0.14
	SD	1. 99		2. 5		2.07		C&A : 0.61
Movement	M	3. 26		3.16		4. 7		A&B : 0.38
Responses			(6.99)		(6.65)		(7.76)	B&C: 2.20*
	SD	1. 98		2.03		3. 25		C&A: 2.11*
Rejection	M	14. 13		17. 06		10. 5		A&C : 0.97
of			(22.79)		(27. 53)		(16. 93)	B&C :2.20*
Images	SD	11. 08		12. 21		12. 48		C&A : 1.2

The present part of the paper reveals the diagnostic significance of somatic profile of SIS-II among three sub groups of neurosis consisting of Anxiety, Depression and Dissociative Reaction.

It can be observed from Table 5, that out of 7 qualities of response variables, 5 were found to be significant and sensitive enough, especially between Depression and Dissociative Reaction. It further depicts that the cases of Dissociative Reaction tend to produce more number of responses (M: 60.57) as compared to those of Anxiety and Depression (M: 51.0 & 47.56). However, most of their responses were of 'atypical' type (M : 23.29), which are unexpected or much away from the embedded theme of an image, i.e. they remain in their own unique cell (Cassell et al, 2000).

The other variables were 'movement' responses and 'rejection' of images, the more number of quality responses were produced by subjects of Dissociative Reaction (7.76 %) in comparison to other two groups (6.99 & 6.65 %). The movement responses were capable to discriminate significantly among the patients suffering from Depression and Dissociative Reaction, and Anxiety and Depression (CR:2.20* and 2.11*). The 'rejection of images' was more prominent among depressive subjects (27.53 %) as compared to other two groups (22.79 & 17.93 %). The present trend was found to be similar to those of previous studies, when these subjects have been taken as a whole in the category of 'neurotic' patients. They have also shown more rejection of images and Atypical responses.

Table 6

Significance of Mean Difference of Contents of Responses among Three Sub Groups of Neurosis :

Contents of Responses		Anxiety (n : 30) (A)	%	Depression (n : 30) (B)	%	Dissociative Reaction (n : 40) (C)	%	Level of sig. CR – Values
Humans	M	15.36		14. 1		18. 75		A&B : 0.99
			(31.12)		(29. 66)		(30. 9)	B&C : 3.03**
	SD	6. 09		4. 39		8. 49		C&A :1.96*
Animals	M	7. 13		5. 93		8. 35		A&B : 1.00
			(13. 98)		(12. 4)		(13 79)	B&C : 2.66**
	SD	5.3		4.26		5. 61		C&A : 0.95
Anatomy	M	11. 26		9. 00		12. 80		A&B : 1.15
			(22. 08)		(18. 93)		(21. 14)	B&C : 1.80
	SD	7.80		7. 19		9. 93		C&A : 0.72
Sex	M	1.80		1. 40		3.1		A&B : 0.35
			(2. 27)		(2.94)		(5.12)	B&C : 1.58
	SD	1. 31		3. 48		5. 52		C&A : 2.15*

Table 6 narrates the diagnostic significance of somatic profile based on contents of responses on SIS – II among three sub groups of Neurosis. It can be observed that ' human' contents are able to differentiate between Depressive and Dissociative Reaction, and Anxiety and Dissociative Reaction (CR: 3.03** & 1.96*). However, the percentages of human contents in the three subgroups were almost similar. (31.12, 29.66 & 30.9 %). The Animal responses were more in Dissociative and Anxiety group (M: 8.35 & 7.13), as compared to those of Depression (M: 5.93). The CR value (2.66) was found to be significant between the subjects of Depression and Dissociative Reaction only. The Sex responses were the other prominent content, which could discriminate these three groups of neurosis. The Sex oriented contents were more common among Dissociative subjects

(5.12 %), the CR value (2.15*) and was found to be significant among patients suffering from Anxiety and Dissociative Reaction only, which is quite in expected direction particularly in army setup where army personnel live alone for months together away from their family. The present finding are in accordance of previous observations in other studies (Cassell 1990, 1995; Dubey and Cassell, 1993; Rathee et. al. 1995, 1996).

Table 7

Significance of Mean Difference of Pathological Contents of Responses among Three Sub Grups of Neurosis

Path. Contents Rating Scales		Anxiety (n : 30) (A)	%	Depression (n : 30) (B)	%	Dissociative Reaction (n : 40) (C)	%	Level of sig. CR – Values
PAS	M	2. 2		1. 9		2. 02		A&B : 0.53
			(4. 31)		(4. 0)		(3. 34)	B&C : 0.19
	SD	2. 29		2. 35		2. 35		C&A : 0.27
HAS	M	0. 3		0. 43		5. 40		A&B : 0.72
			(0. 59)		(0. 96)		(0. 79)	B&C : 0.20
	SD	0. 52		0. 96		2.23		C&A : 0.20
D	M	1. 2		1.70		1. 35		A&B : 0.96
			(2. 35)		(3. 70)		(2. 23)	B&C : 0.71
	SD	1. 72		3. 10		1.76		C&A : 0.71
P	M	0. 26		0. 10		0. 46		A&B : 1.60
			(0. 51)		(0.21)		(6. 9)	B&C : 4.00**
	SD	0. 5		0. 3		0. 4		C&A : 3.64**

Table 7 - As far as the pathological contents and rating scales/ scores among three groups of Neurosis were concerned, there was no significant difference, except that of Paranoid (P) Scale. Paranoid (P) contents were noticed to be more prominent among hysterical subjects, followed by Anxiety and Depression (6.9, 0.51 and 0.21 % respectively). The mean differences were significant among patients suffering from Depression and Dissociative Reaction, and Dissociative Reaction and Anxiety (CR values 4.00** & 3.64**). No significant difference was seen between Anxiety and Depression. The present observations are un-comparable due to paucity of research work in this field, except those of preliminary work done by Cassell (1977, 1990). However, our present findings are confirmatory to our previous observations (Saldanha et.al. 1993, Rathee et.al.1994, 1995,; Verma et al, 1995).

Table 8

Significance of Test Comments among Three Sub Groups of Neurosis

	Anxiety			Depression			Dissociative Reaction			
Test	Image	Remarks	%	Image	Remarks	%	Image	Remarks	%	Comments
Three	5B&29B	9	30.0	5B	12	40.0	5B	21	52.5	Three
Images	31A	8	26.7	31B	10	38.3	31B	16	40.0	groups
Most liked	20A	6	20.0	28B	9	30.01	29B&31B	13	32.5	differed
Three	31A	4	13.31	30A	8	26.66	30A	13	32.5	Three
Images	4A	3	10.0	10A	5	16.66	4 A.	5	12.5	groups
least liked	18A	2	6.7	28B	4	13.3	4 B.	4	10.0	differed
Percep-	Positive	22	73.3	Positive	14	46.6	Positive	31	77.5	Three
tion of	Negative	6	20.3	Negative	14	46.6	Negative	9	22.5	groups
Test	Neutral	2	6.67	Neutral	2	6.66	Neutral	0	0	differed
Feeling	Positive	22	73.3	Positive	14	46.6	Positive	24	60	Three
After	Negative	7	23.3	Negative	14	46.6	Negative	14	35	groups
Testing	Neutral	1	3.3	Neutral	2	6.6	Neutral	2	5	differed

Table 8 reveals the Test Comments have significance while understanding the interpersonal relationship and psychopathological disturbances among these patients. As far as, the first enquiry was concerned, the human oriented figures like 5B, 31A, 31B, 28B, and 29B, etc. were more common among three groups. But no such homogenous observations were noticed while pointing their least liked images, among three groups. The test was perceived to be difficult and painful by depressive subjects (46.6 %), where as other patients suffering from Anxiety and Dissociative Reaction found the test to be easy, interesting and informative and endorsed their positive remarks (>70%). The same trend was observed on their feelings after completing the test. In addition to it, it was observed that the anxiety cases found them to be more anxiety free and cool emotionally, after reacting on SIS images, which is evident from their frequencies (73.3 %) as compared to other two groups i.e. Depression and Dissociative Reaction (46.6 & 60 %). The patients of Depressive and Dissociative Reaction got tired and tensed after the completion of the test as evident by their frequencies. It can be said that the test comments really possess great significance in understanding their inner psychodynamics and behavior pathology, which is rightly endorsed by previous researchers (Cassell, 1980, 1990, Cassell et. al. 1996, Pandey et al , 1996, and Rathee, 1995).

Conclusion

It can be concluded that the Somatic Inkblot Series –II is a sensitive diagnostic test among various groups of Psychosis and Neurosis. Among three sub-groups of Psychosis – Schizophrenia, Affective Psychosis and Un-Specified psychosis, three indices proved to be sensitive enough to discriminate among them. Among three subgroups of neurosis – Anxiety, Depression and Dissociative Reaction Hysteria, eight indices were observed to be highly sensitive to discriminate them significantly. Only one rating scale i.e. paranoia, was found sensitive enough among various sub groups of Psychosis and Neurosis. The test comments proved to be more significant among various sub groups of psychosis and neurosis to discriminate, as well as to understand their inner cry. Majority of the patients from both categories liked the human oriented images and least liked the vague images. Most of the people liked the test very much and felt comfortable while reacting upon it. The SIS-II can serve as a dependable psycho – diagnostic test to discriminate among various sub - groups of psychosis and neurosis of Armed Forces.

References

Cassell, W.A. (1977) Aggressive Imagery and Clinical Symptoms in Schizophrenia. British Journal of Projective Techniques, 22,21-34.

Cassell, W. A. (1980) Body Symbolism: Somatic Inkblot Series. Aurora Publication Company. 213 West Sixty Avenue, suite 8, Anchorage, Alaska- 99501.

Cassell, W.A. (1990) Manual: Administration, Scoring and Interpretation, Somatic Inkblot Series. 4045 Lake Otis, suite 101, Anchorage, Alaska 99508.

Cassell, W.A. and Dubey, B.L. (1996) The Use of the Rorschach and Somatic Inkblot Series in Releasing in Somatised Grief. SIS Journal Projective Psychology and Mental Health, 3 (1) 3-32.

Cassell, W.A. and Dubey, B.L.(1997) SIS-II/Video Manual. SIS Center, 4501E, 104th Avenue, Anchorage, AK-99516 (USA)

Cassell, W.A., Dubey, A. and Dubey, B.L.(2000)SIS Projective Ressponses in PTSD and Dissociative Disorder, SIS Journal of Projective Psychology and Mental Health, 7: 93-108

Cleveland, S.E. (1960) Judegment of the Body Size in Schizophrenic and a Control Group. Psycholgical Report, 7,304.

Dubey, B.L. (1982) A Pragmatic View of Rorschach Inkblot Techniques. National Psychological Corporation. Bhargava Bhawan, 4 / 230 Kacheri Ghat, Agra, India.

Dubey, B.L. and Cassell, W.A. (1993) Some Experience with SIS-II. British Journal of Projective Psychology, 38, 1:19-41.

Dubey, B.L. Cassell, W.A., Dwivedi P. and Mishra, M. (1995) Inner Cry through Somatic Inkbklot Series. SIS Journal of Projective Psychology and Mental Health. Vol.2 : 119-128.

Dubey, B.L., Cassell , W.A. Pershad, D. and Dwivedi, P. (1995a) Diagnostic Utility of Somatic Inkblot Series. SIS Journal of Projective Psychology and Mental Health. Vol. 2(1) : 77-84.

Kumar, S., Singh, R. and Mohanty, S. (2001) A Study of SIS-I in Hospitalized Male Schizophrenics.

SIS Journal of Projective Psychology and Mental Health. Vol 8 (1) 31-34.

Mishra, M. (1995): Compatibility of SIS-II and Rorschach Indices in Normal, Neurotic and Schizophrenia. Ph. D. Thesis, B.H.U. Varanasi.

Pandey, R. Mishra, M. and Dwivedi, C. B. (1996) A Quantitative Analysis of Liked and Disliked SIS-II Images. SIS Journal Projective Psychology and Mental Health. Vol.3, No.2,123-130.

Rathee, S.P., Goel, D.S., Chawla, M.L., Saldanha, D. and Dubey, B.L.(1994) A study of Somatic Inkblot Series-I in Coronary Cases. SIS Journal of Projective Psychology and Mental Health. 1, 51-64.

Rathee, S.P., Pandey, V. and Singh, A. (1995) Diagnostic Efficacy of SIS-II amongst Psychiatric Patients of Armed Forces. SIS Journal of Projective Psychology and Mental Health. 2, 61-66.

Rathee, S.P. and Singh, A. (1996) A Comparative Study of Male and Female on SIS-I, SIS Journal of Projective Psychology and Mental Health. 3, 43-49.

Saldanha, D., Goel, D.S., Rathee, S.P., Chawla, M.N and Dubey, B.L (1993) : Personality Profile of Coronary Cases. Indian Juornal of Psychiatry. Vol. 35, 197-199.

Verma , S.K., Pershad , D., Kaur , R and Nehra, R. (1995) : Diagnostic Significance of SIS-II . SIS Journal of Projective Psychology and Mental Health, Vol.2 (1), 51-58.

APPEAL

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The Reflective Analysis of the Personality Problems of the Young Female Subjects : A Cross - Cultural Approach

Anatoly B. Khromov, Gene Starbuck, Nonie M. Birkedahl and Bankey L. Dubey

A questionnaire containing 99 questions dealing with different problems of youth were administered to 261 adult male and female students (134 Russians, 40 Americans and 87 Indians). Out of these, 61 were male Russians, 27 male Americans and 54 male Indians. The data thus obtained was compared between male and female subjects. The findings suggest that the Russian young women perceived more problems than American and Indian young women. Their problems in different areas such as uncertainty of future, working hours, housing, inequality of payment, limited role of women in political life and sexual violence have been discussed and compared in three cultures.

The level of intensity of problems between male and female vary from culture to culture. Even one can find the reaction of men and women are different towards various situations. In the comparative research we have tried to allocate the basic psychological female problems experienced by youth. The basis of the research was the knowledge of the young people up to the young adulthood age, to determine the character and subjectively experienced personality problems. The problems of a person are not static, but are constantly evolving; developing set of questions is acquired to cope with the demands and dilemmas that face mature individuals. The present study was planned to find out the attitude of young men and women towards perception of self, self-body imagery, problems of working hours, inequality of salary and sexual violence particularly in women.

Method

The list of the statements, consisting of 99 youth problems obtained during a survey of more than 400 students both male and female between the age of 17 and 22 years. The questionnaire was offered to the female subjects of Kurgan State University in Russia (n= 134), Œ¥s College in USA (n= 40) and Panjab University, Chandigarh in India (n= 87). All the statements of the questionnaire were scored using a three-point system of estimation, showing the actual degree of the problem, criterion of which was its emotional importance for every subject in each of the three groups. The estimation of the group data, obtained from the female subjects, were compared to similar parameters of the young male subjects (the n= 61, 27, 54).

Results and Discussions

The descriptive statistical analysis indicates the distinctions of the problems, which are experienced by the female significantly stronger in comparison with the male subjects of the same age. Also the problems affecting Russian young women are significantly more than those of young American and Indian women.

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The Analysis of Primary Problems (99)

On the first investigation phase of the study all the subjects were divided on the basis of gender (male and female groups), which helped us to find out the specificity of female and male youth problems in their respective cultures.

Table 1 indicates the average estimations of the problems by female subjects (from the list of 99 problems), which were found statistically higher than the estimations of the group of the young male subjects.

Table 1

Typical Problems of The Young Women

Factors	Mean	T	p
Dialogue with a favorite person	2.60	- 3.14	<0.02
Problem of physical appearance	2.40	2.26	< 0.05
Harmony of figure	1.91	2.24	< 0.05
Facial appearance	1.75	2.30	< 0.05
Uncertainty of the future	2.28	2.40	< 0.05
Anxiety that the people frequently begin wars	2.23	2.33	< 0.05
Difficulties in obtaining housing	2.11	2.34	< 0.05
Problem with organizing working hours	2.10	3.33	< 0.02
Unresolved problems of gender equality	2.01	4.91	< 0.001
An inequality in payment in the labor force	2.10	3.71	< 0.001
Limited role of the women in political life of the countries	1.95	2.46	< 0.05
There is not high enough level of culture in this country	2.04	2.61	< 0.05
Limited opportunities of youth in choosing leisure activities	2.08	2.33	< 0.05
The youth is not able to rest	1.81	2.40	< 0.05
Problem with organizing one's personal life	2.01	2.03	< 0.05
Young women know many cases of sexual violence of women	1.96	2.64	< 0.02

The problems of the young women, which scored significantly higher than estimations of the problems of the young men are represented in table 2, and the level of these problems are identical in all three cultures.

Table 2

Problems which are not Significantly Different among the Groups of the Female Subjects (Problems that Exist among Young Women in all Cultures)

Dialogue with a favorite person is important to me
Many young men/women have defects of figure
There must be equal wages for men and women
Women know many cases of sexual violence against them
Women insufficiently influence the political life of the country

The typical problems of young men are listed and shown below in table 3.

Table 3
Typical Problems of the Young Men

Reliance that the well-being of a society depends upon the activity of each person
(2.17 t - 2.05, P < 0.05) Existing unemployment in this country (2.10 t - 2.34, P < 0.05);
Safety of the country (1.98 t - 2.47, P < 0.05);
Desire to learn about safe sex (1.71 t - 2.80, P < 0.05);.
Lack of physical development of a person (1.68 t - 2.18, P < 0.05);
Insufficient financing of science and arts in this country (1.53 t - 5.33, P < 0.001)

The psychological distinctions of gender are reflected in the character of realized problems. The vector of the young female relates directly to the female fundamental problem of ensuring the continuation of the human race. The young women focus more on gender-specific tasks, such as family planning, appearance, female independence and self-confidence. The young women are less concerned with problems, which have social, economical and political meaning. They are less worried about a career too, because these are the men with specific problems. Table 4 represents the problems concerning the young women of the three cultures. The results are achieved by a method of statistical comparison, where, the absence of authentic distinctions on criterion of t - Student has formed the basis for allocation of these problems in the special group (from the list of 99 problems).

All these problems determine sexual dimorphism to a greater degree than the cultural distinctions and excite equally the young women in all countries. In the analysis of distinctions of the primary personal reflexive estimations of the female subject's problems in different cultures the following patterns were found: the lower the level of socio-economic development of the country, the higher the estimated intensity of the problems. Taking the criteria of comparison, the amount of significant differences of the estimations and the level of intensity (from all of 99 problems) in young women is shown below:

Table 4

Problems Similarly Related to the Young Women in Russia, India and USA

Young men/women are concerned about relationships with the opposite sex
The cruelty and maliciousness of people existing in the society
Young men/women are strongly focused on material things
The existence of incurable illnesses on this earth
The senior generation condemns sexual freedom among young people
Young men/women hasten to experience every facet of life
Many of my peers are afraid of catching a venereal disease
It is interesting to know if it is posibele to fall in love once more
The people perceive me as an impulsive person

Table 5

Ratio of Problems in Different Countries

Russia and USA	43: 60
Russia and India	12: 46
USA and India	5: 48

The American subjects, in comparison with the Russian and Indian young women, self-reflect the high concern only on the following questions:

Table 6

Comparison of Russian and Indian Young Women with Americans on Self- Reflect

The fact, that people use alcohol, drugs and smoke tobacco (for the Russian female subjects the problem of drugs was sharper, than for Americans);
Adults condemn the early beginning of sexual life, sexual contacts of the young outside of marriage
Many of the problems with homosexuality and sexual deviation are distressing to the young women/men (these problems concern the Russian subjects the least).

The analysis of the distinctions of the parameters in the groups of the young women has shown that the Russian subjects in comparison with the American subjects are more emotional and jealous; they are more worried with the problems of training ($t - 12.86$, $P < 0.001$); they are more concerned with the low level of public morals and culture. The Russian young women are not sure about their future ($t - 6.73$, $P < 0.001$); they are afraid of their future independent life ($t - 8.75$, $P < 0.001$); they have the problems with one's family creation. And at the same time, the Russians are more concerned with the problems of self-perfection than the Americans, and with the mankind's global problems ($t - 5.18$, $P < 0.001$).

The Russian subjects in comparison with the American and the Indian subjects have shown low concern towards religion. They demonstrate low moral and increasing jealousy to compensate it. The Russian subjects have more problems of economic and social development of the country than the Indian subjects of the same age. The Russian are afraid of economic difficulties, which they expect to face in the independent life (t - 7.80, $P < 0.001$); they are concerned with the problems of training (t - 4.94, $P < 0.001$), the mankind's global problems (t - 3.28, $P < 0.02$), the problem of the family making (t - 2.52, $P < 0.05$). It seems that the problems were caused by the changing socio-economic situation in Russia. The transitive period, experienced by Russia, is reflected on the consciousness of the young people as additional psychological problems. The Russian young women are less concerned with the following problems than the Indian of the same age: the problem of appearance (t - 4.98, $P < 0.001$); the one's own problem of innocence (t - 5.31, $P < 0.001$); the problem of the women's social passiveness (t - 5.55, $P < 0.001$); and the problem of the women's role, which she plays in society (t - 3.97, $P < 0.001$). It seems, that the women in India are holding higher respect in society than in Russia.

The Indian subjects are more concerned with the questions of spiritual and physical perfection of the person and the problem of health, than the Russian. Also they display sobriety and judiciousness more than Russian. On the contrary Russians are more intuitive, sensitive, impulsive and jealous in comparison with the Indian young women.

The Factor Analysis of the Primary Problems

Factor analysis was used to analyze the data. The 99 items were factor analyzed using Iterated Principal Factor Analysis with Orthogonal Varimax Rotation and Oblique Procrustes Rotation. It has allowed, grouping primary structural components of experimental data, to reveal the internal generalized tendencies, inaccessible to research at the direct analysis of statistical parameters. Factor analysis has allowed identifying these generalized tendencies as the latent personal experiences, received in comparative cross-cultural study.

There are three generalized factors of the twenty-four that are the most significant (on percentage size of the explained dispersions) and contently interpreted, taken separately for the female subjects of the three countries. Each factor contains in itself a number of primary components, selected on criterion of the maximum of size factor loading, determining by the pithy affinity interpretation of the generalized attribute of the problem. The first factor in the groups of the Russian and American subjects contains similar primary problems, which, in basic, reflect emotional peculiarities of the person; therefore this factor was interpreted as " Emotional peculiarities of the person ".

The first factor: The first factor of problems of the Russian young women - " Emotional peculiarities of the person: emotional instability " (11.8 %). The first factor of problems of the American young women - " Emotional peculiarities of the person: social activity and domination " (11.1 %). The first factor of problems of the Indian young women " Problems of self-perfection " (12.7 %). Representatives of East culture are more, than the Russian

and American at the same age concerned with the problems of spiritual, aesthetic and intelligent perfection of the person.

The second factor: The second factor of problems of the contents of structure pulls together the American and Indian subjects. It was interpreted as " the Sexual interdictions of the senior generation "Socio-cultural environment, to which these subjects belong, rigidly regulates sexual behavior of the young people up to marriage. For the Russian young women this problem is less significant: the contents of the second factor are the problems of individual morals. In the group of the Indian female subjects the second factor of problems is interpreted " the Sexual interdictions of the senior generation and relationship with opposite sex " (6.5 %). The second factor of problems of the American subjects - " the Sexual interdictions and relationship with opposite sex " (6.6 %). The second factor of the problems of the Russian subjects - " Individual morals and habits harmful to health " (6.2 %):

The third factor: The third factor of the problems of the young women has different components of the contents in all three groups: the Russian subjects - the emotional experience, connected with infancy and innocence, the Indian subjects - the problem of organization of the personal life, the American subjects - the problem of public morals. In the group of the Russian subjects the third factor was interpreted as " one's own infantilism and innocence " (5.3 %). In the group of the Indian subjects - " Organization of the life " (5.2 %). In the group of the American subjects - " Public morals " (5.6 %).

The Analysis of the Generalized Problems (24)

On the second investigation phase, proceeding from the data of statistical analysis (factor and correlation), a test questionnaire was designed, intended for revealing the ability of the young men/women of young age to reflect the psychological problems and to determine their level. The 24 generalized (secondary) factors were confirmed. Each of the factors consisting four primary problems (items- from the list of 99 problems), were scored using a three-point system of estimation. During the comparative analysis four significant distinctive parameters of generalized problems appeared in the groups of Russian, American and Indian subjects. In the group of Russian subjects the level of the problems is higher than in the groups of India and USA. Comparatively the Russian females were more than the subjects of the same age in India and USA and were more concerned with the problems shown below:

1. **Educational Financial Problems**
   - The economic situation of the country is not quite favorable for life
   - The low educational level of the country depressing the young people
   - The young men/women are concerned with existing paid training in the country
   - Insufficient financing of education (science and art) in our country

2. **Family Making Problems**
   - Young men/women worry about their future family life
   - Young men/women are afraid of the future difficulties in obtaining housing
   - Education problem of the future children disturbs

3. Economic Difficulties of Independent Life

- The young men/women are concerned with existing paid training in the country
- The young people are concerned with existing paid medical service in the country
- The young men/women are afraid of the future difficulties at purchase of house/ lodging
- Many problem of material maintenance of the future family

4. Global Humanity Problems

- The fact, that the people frequently begin wars
- Ecological problems of the Earth, drug-addiction
- The cruelty and maliciousness of people

The analysis of cross-cultural distinctions in the estimation of generalized problems between the young women and young men are presented ahead:

The analysis of the generalized reflective parameters of the problems, shown by the female and the male subjects allows especially to allocate a problem, that is connected with the women rights in a society (it is further interesting to note that this problem worries young women more than young men in Russia and USA). A according to this scale there is difference between the young women and the young men in Russia and USA (t - 5.68, $P < 0.001$, in USA t - 2.11, $P < 0.05$). On this scale the following reflective experience enter: an unsolved problem of equality of women; the requirement of equality in payment of labour of men and women; the confidence that the woman actively influence insufficiently the political life of the country; sensitivity to the information on numerous cases of sexual violence against the women.

Despite the significant distinctions, existing in material and social state of the young women in Russia and USA, the reflexive character of this problem for the young women is identical: the women experience an inequality existing in society when compared to young men, which is displayed in social, political and economic spheres - everywhere, where life pushes together women and men.

On generalized estimations of the problems, no difference was found between the groups of the young women and the young men in America. In-group of the Russian young women there is one more parameter on the scale of the generalized estimations of the problems, which statistically differentiates the group of the young men and young women. This parameter reflects a problem, connected with financial and material difficulties of independent life. The level of this problem is statistically higher in the group of the Russian women, than in the group of the young men (t - 2.06, $P < 0.05$). The contents of this scale are given ahead: the young men/women are concerned with paid training existing in the country and paid medical service; the young men/women are afraid of the future difficulties at purchase of lodging; many young men/women are concerned with a problem are financial maintenance of the future family. Character of distinctions of generalized problems of the young women and young men in Indian group are different. The Indian young women are more concerned with the problems of appearance than the young men (t - 3.46, $P < 0.02$): the young men/women have defects of figure; many of the forms and proportions of the person are not liked; many young men/women do not have good coordination of movements, and also a problem of own inferiority

(t - 3.98, P < 0.01) that they are not advanced: the young men/women are afraid of the future difficulties of purchase of lodging; the young women should save their innocence; many young men/women expect material support of the parents after the marriage.

The Indian young women have less complaints about the sexual interdictions of society than the young men of the same age (t - 3.04, P < 0.05) and the problem of real sexual life (t - 3.45, P < 0.02). Reflective contents of these problems is highlighted ahead: the sex problems; the senior generation condemns freedom of the sexual relationships and the early beginning of sexual life; the sexual relation of the young people outside a marriage; many of them are afraid to catching venereal diseases; a problem of safe sex; discrepancy between conception of the people about ideal love and how their behavior in life; an opportunity to love once again? East culture strictly regulates sexual behavior of the woman up to marriage, thus subjectively experienced problems of the young Indian women are taken off.

Conclusions:

Research has shown, that in the context of the personality problems experienced by representatives of the weaker sex; peculiarities, describing similarity and distinction of cultures are broadly displayed. The level of intensity of the reflected personal problems of young women is caused by peculiarities of these cultures, because many young women opt for education and family first and careers later. The contents and the character submitted in consciousness of the personal problems pulls together more young women of Russia and USA, than Russia and India, though in an amount of experienced problems and their intensity the Russian and Indian young women are far from American of the same age.

The distinctions in intensity of the problems of the young women and young men are caused by the sexual dimorphism and peculiarities of young age in a greater degree, than social and cultural factors. The level of reflection of women problems is higher than men problems, with more in advanced economy than the less advanced economy, socio-economic status and changes in society determine so many life-style, educational, and work issues that this needs to be examined too. Further research must consider the results within a historical context, taking into account the changes of political, social, and moral values.

References

K®n I. ‘. Psychology of Early Youth. - Œ., 1989. (in russion)

Mukhina, V. S. (1996) The Psychology of Development. - Œ., (in Russion)

Rice, F. Philip (1996). The Adolescent: Development, Relationships, and Culture. Simon and Schuster.

Ainsle, Meares (1974). The New Woman. Collins, London.

Offer, D. et al. (1988). The Teenage World Adolescents, Self-Image in Ten Countries. Plenum Publ. Book N 4.

Levy Claude, Leboyer et al. (1996). Determinants of Pro-Environmental Behaviors: A Five-Countries Comparison. European Psychologist, Vol. 1, No. 2, June pp.123-129

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Family Intervention in the Treatment of Post-Traumatic Stress Disorders

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Military Hospital Kirkee is a major Spinal cord injury center in the Armed Forces. A number of spinal cord injury cases are transferred to this hospital for definitive treatment as well as for rehabilitative measures. During the course of convalescence, the individual manifest Post Traumatic Stress Disorders. No studies till date has reflected the problems of these cases. Hence a pilot study was undertaken to study a few such cases incorporating the families of those injured. Five out of six PTSD cases showed significant improvement with the intervention of family members. The significance of the role of families in the care of the mentally ill is discussed.

The magnitude of the disability caused by mental and neurological illness in a developing country with inadequate resources and trained manpower is enormous. A broader view of the current models, techniques and services is required to tackle emerging issues and develop models for the future. The strength of the family is often quoted as a favorable factor in long-term outcome of mental illness. It is time to begin addressing these issues in the context of the developing world where families play a major role in the care and management of the mentally ill. The year 1996 has been a significant one for rehabilitation of the mentally ill as it is the year in which mental illness has been included in the category of disabilities by the Ministry of Welfare, Govt of India. Prior efforts in India in rehabilitation of the mentally ill have been isolated. It was left to the efforts of the handful of agencies and has not developed throughout the country. Violence, injury and death can come suddenly and unexpectedly in virtually any situation for the civilian and soldier alike. Development of PTSD in such situations is recognized. Epidemiological statistics of lifetime prevalence of PTSD range from 1 to 9 percent along with high levels of chronicity and co-morbidity (Davidson et al 1991, Breslau et al 1991). A chronic adjustment syndrome akin to PTSD has been reported among Vietnam veterans and 22% of the 64 Falkland war casualties were rated having the complete PTSD at the end of 5 year follow up (Dorien and Hughes 1991). The full syndrome of posttraumatic stress usually develops some time after the trauma. The delay can be as little as one week or as long as 30 years. Symptoms can fluctuate during this time span and may become more intense during periods of stress. Early identification of PTSD followed by intensive crisis management has shown to reduce the development of PTSD at a later stage in a study conducted recently (Saldanha et al 1996). Incorporating family members in the treatment of PTSD has not been tried to date, especially so in the services where in the rehabilitation of the injured is recommended as per the guidelines laid down (GOI 1980). Although these guidelines and subsequent rehabilitative methods give a measure of hope to the traumatized individuals, family psychotherapy and intervention in early stages of PTSD will no doubt, not only prevent long term effects but also help the individual to adjust to the new environment to which

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he has been an alien. Following five case studies illustrate the importance of incorporating family members in dealing with the Post Traumatic stress symptoms in the early stages of recovery and how incorporating a family member could have helped prevent chronicity of PTSD in the sixth case.

Material and Methods Adopted

The study was carried out at a major orthopedic based hospital from 10 Feb 95 to 15 Dec 96. Cases who were referred to the psychiatrist were screened for Post Traumatic stress disorder symptoms on the criteria outlined in DSM III (R) (Berthold 1992) supported by use of Somatic Inkblot tests. All six cases met the criteria for PTSD. As a first step the individual's life history was reviewed and the situational psychic profile was discussed with him to effect a global change in his life style. Family members were incorporated in the treatment wherever possible. Five families actively cooperated in a traumas based cognitive frame work and insight oriented psychotherapy to effect on attitudinal change towards a better life to an extent possible. These patients who recovered from their PTSD were encouraged to motivate other paraplegics and quadriplegics. Following are the illustrative examples of the case studied.

Case Study Profiles

Case No 1. A 17 years old recruit, only son of a low middle class family while proceeding to Secunderabad EME Centre for training was thrown out of the running train during change over at CST Mumbai on 26-06-95. He sustained grievous injuries to the body and neck. The Railway Police which got him admitted to a civil hospital at Mumbai rescued him. The attending doctors found the Centers call letter and thus transferred him to INSH Asvini for management of his cervical cord injuries. He had developed quadriplegia as a result of fracture of C5-C6. For major orthopedic treatment he was transferred to Military Hospital Kirkee on 21-09-95. Two months after the hospitalization he was referred to the psychiatrist, as the individual was not cooperating with the staff and not sleeping at night. On psychiatric examination he was found to have full-blown PTSD hence intensive treatment was initiated and help of family members was sought. The individual could relate well to his younger sister. Family members were appraised of the disability and the need to intervene and convince the individual that he would recover to an extent that he could look after himself although chair bound. Within six months the individual recovered fully from PTSD symptoms.

Case No 2. Militants shot a 38-years old Lieutenant Colonel married and having two young children on 9th Oct 1994 at a militant hide out in Srinagar. Grievously wounded and unconscious, he was taken to a Zonal Hospital where bullet lodged in D12-L4 areas was removed. Intra peritoneal damage was repaired. Paraplegia was discovered soon after and was transferred to Army Hospital Delhi for orthopedic care. He was subsequently transferred to Military Hospital Kirkee for rehabilitative measures & further management. He was referred to the psychiatrist as he continued to complain of pain in the left leg and would not sleep at night. Organic cause for the same was ruled out. He

was put on antidepressants and family intensive insight oriented psychotherapy was given for his PTSD symptoms. This induced considerable improvement both in his mental attitude and outlook. He improved there upon and was able to walk with the help of calipers. He was retained in the service with restrictions on his employability and had no PTSD symptoms on discharge.

Case No 3. A 21 years old cadet, undergoing training at IMA, few days before his passing out sustained injury to his neck on 29-4-95 at 17.45 hrs. while doing an obstacle course. He was immediately admitted in a Zonal Hospital at Dehradun, later transferred to Army Hospital Delhi for orthopedic management on 18-5-95. The individual had sustained grievous injury to his C5- C6 vertebrae, which were fractured and avulsed. A month later he was transferred to Military Hospital Kirkee for cervical vertebras fixation and bone graft. He had developed quadriplegia & PTSD by then. He was withdrawn, dull and depressed. Intervention of family members helped to repose faith in him and was able to withstand the negative cognitive thoughts. Besides recovering well, he became a role model for other paraplegic and quadriplegic patients and successfully completed computer course with APTECH.

Case No 4 and 5. Two academically brilliant Test Pilots from IAF and Army aged 30 yrs and 31 yrs while test piloting a helicopter crashed on the morning of 28-8-96 at Bangalore airfield, sustaining fracture dislocation of dorsal spine at the level of D9-12 completely transecting the spinal cord resulting in complete paraplegia. They were airlifted to Military Hospital Kirkee on 2-9-96 for intensive orthopedic treatment; Harrington Rod Fixation was done on 18-9-96 and 23-9-96. Both officers are married with small children. Besides having paraplegia, the traumatic events have had their effect on their psyche in the development of posttraumatic stress disorder symptoms. In view of the severity of disability, early intervention of the family, and psychoactive treatment was initiated. Three months of active family support and psychotherapy helped to control the posttraumatic stress disorder. Both the officers are now mobile on wheel chair and look forward towards rehabilitation.

Case No 6. A 26 years old young and promising JCO from Navy belonging to a poor socio-economic background sustained injury to his dorsal spine at the level of D6-D7 and complete transaction of the spinal cord as a result of a fall from motorcycle on 16-3-96 on a rainy day at Madras. He was airlifted to Military Hospital Kirkee on 17-3-96. Besides having complete paraplegia, he had bilateral haemothorax. His physical disabilities caused him enormous mental anguish and helplessness resulting in a suicidal attempt. Severely depressed, he was subjected to antidepressant therapy besides adequate nursing support. His father's death early that year had put additional stress on him to support his mother and unmarried younger sister. He was craving for sympathy, entertained self-deprecatory ideas and felt helpless in that state. He did not sleep nor looked after his nutrition. He had to be forcefully fed. Intensive treatment with antidepressant drugs and nursing support improved his mental state. However, family support, which was not forthcoming, would have helped the individual to tide over the

post-traumatic stress symptoms to a great extant. He continues to be under active psychoactive drug therapy.

Discussion

In most therapeutic approaches, empathetic relating is fundamental. For posttraumatic therapy in particular, empathy can be built by considering how a person has been hurt rather than focussing on the deficiencies of the person (Bloom,1994). As with other psychotherapeutic approaches to PTSD, research on the out-come of group and family therapy has lagged behind clinical application. Surprisingly few studies have systemically evaluated treatment effectiveness. For example in a 1992 review of the efficacy of PTSD treatments, psychopharmacologic interventions received far more attention than psychotherapy techniques (Berthold, 1992). Acute trauma is most damaging to a family system that is already dysfunctional. As is the case with the individual, even a relatively minor stress can precipitate a crisis in a family already burdened by economic stress. For the adult who is the identified patient, the first focus of family intervention should usually be with the family of choice as in the present case 6, whose family could not be incorporated in the treatment programs. Family members need extensive psycho education to provide them with a trauma based cognitive framework within which, they can reframe the family problems as a family challenge and survival mission (case 1,2,3,4& 5 refer). The family members can be instructed toward understanding the role they are playing in a traumatic re-enactment scenario and guided toward a redirection of the family script in a more satisfying direction. It is well known from earlier work in various traumatized groups, that social support is one of the few factors that attenuate trauma. Family therapy sessions can turn the energy of the family from traumatogenic to supportive, once the healthier members of the family join together to provide what the identified patient actually needs rather than playing auxiliary role in patients traumatic re-enactment (Solomon et al 1993). In the case studies mentioned above, in Case No1, the sister of the patient played active role as a healthy member of the family in providing support to the patient. In Case No 3, the mother played the active supportive role and the patient could depend on her for any trauma re-enactment. Case No 2, 4 and 5, the wives of the officers supported their husbands in no small measure to lift their morale and boost their confidence and ego to get well enough to move around in the wheel chairs. This is what lacked in the Sixth Case besides the social & nursing support given by the nursing staff and the psychoactive drugs that could not lift the morale of the patient. Scarfield (1990) found that veterans completing the 12 weeks multi-model treatment program improved their self-esteem and inter-personal relationship and decreased numbing and arousal. The case studies mentioned above bear ample testimony that multi modal PTSD treatment program that combines behavioral cognitive, psychopharmacological and family interventions in the early stages prevent chronicity of PTSD symptoms to a great extent. Absence of family support in Case No 6 further strengthens this assumption. Although group and family therapies currently provide relief and growth for PTSD patients, many considerations remain for the future. For

example how can patients be matched with various treatment for optimal results? How should acute and chronic PTSD treatments be similar and different? What is the effectiveness of group and family therapies for PTSD? (Allan & Bloom 1994) As of now little data is available on family interventions therapies. Further research in this area is not only required but it is a necessity to reduce the chronicity of PTSD symptoms in an individual who is already physically disabled for life. The aforesaid case studies perhaps may contribute in evolving a strategy for the treatment of PTSD in the physically disabled.

References

Davidson, J.A.T., Hughes, D. and Blazer, D.C. (1991). Post-traumatic Stress Disorder in the Community, an Epidemiological Study. Psychological Medicine: 21: 713-73.

Breslau, N., Davis, G.C. and Andreski, P. (1991). Traumatic Events and Post-traumatic Stress Disorder in an Urban Population of Young Adults, Arch Gen Psychiatry, 48: 216-22.

Dorien, L.C. and Hughes, G.J. (1991). Symptoms of Post-traumatic Stress Disorder in Falklands Veterans Five Years After the Conflict, Br J. Psychiatry 159: 135- 45.

Saldanha, D. Goel, D.S., Kapoor, S., Garg, A. and Kochar, H.K. (1996). Post-traumatic Stress Disorder in Poly Trauma Cases. MJAFI. 52, 35-39.

Guide, to Medical Officers (1980). Entitlement. General Principles. Chapter 11 p 6 to 9. Government of India New Delhi, Ministry of Defence.

Berthold, P.R., Ingrid, V.R.C. (1992). Post-traumatic Stress Disorder. The History of a Recent Concept. Br. J. Psychiatry, 161, 742-8.

Bloom, S.C., (1994) Creating Sanctuary. Ritual Abuse and Complex PTSD Treating Survivors of Satanist Abuse. London Routledge

Solomon, S.D., Garrity, E.T. and Muff, A.A. (1992) Efficiency of Treatments for Post-traumatic Stress Disorder. JAMA, 268, 633-638.

Solomon S.D., Brave M and Rubie Stipec, M. (1993). Effect of Family Role on Response to Disaster. J Trauma Stress, 6: 255-269.

Scurfield, R.M., Kenderdine, S.K. and Pollard, R.J. (1990). Inpatient Treatment for War Related Post-traumatic Stress Disorder. Initial Findings on a Long-term Outcome Study. J. Trauma Stress 3: 185- 200.

Allen, S.N. and Bloom, S.L. (1994) Group and Family Treatment of Post-traumatic Stress Disorder. Psychiatric Clinics of South America. 17, 2, 425- 437.

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Rorschach's Response Patterns of Drug Addicts

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Projective techniques have been used with various populations for the assessment of behavior. The Rorschach InkBlot test is the most popular projective technique widely used as a tool to unearth the deep-rooted emotional conflicts, which has not yet manifested in overt behavior. The test is also used as a tool of personality assessment and diagnosis of different types of mental disorders. The present paper is an attempt to study personality aspects of drug addicts with the help of Rorschach test.

The sample of this study includes 7 drug addicts under treatment at drug de addiction centers. Rorschach Inkblot Test has been used to assess personality aspects of these subjects. The responses have been recorded as per Beck scoring system. The findings are discussed in the paper.

Drug abuse is a great problem in every society throughout the globe. It has become the problem of universal concern during the past two decades. Drug abuse has psycho-socio-medical implications and should be treated in the life situations of the addict. Drug abuse is a multifaceted and multidimensional problem. A variety of socio-economic factors, which have been held responsible for this malady are familial discord, social ostracism, emotional insecurity, stress of modern life and professional anxiety and low values.

The term " Drug" refers to a wide variety of chemical substances consumed by men / women, not merely to narcotics or dangerous drugs. The pharmacological interpretation of a drug is any substance, other than food, whose chemical and physical nature alters structure or functions in a living organism. Drug Addiction as defined by W.H.O. is " a behavioral pattern of drug use characterized by over whelming involvement with the use of a drug, compulsive drug seeking behavior and a high tendency to relapse after withdrawal." Besides it is viewed as a continuum relative to the degree where drug use affects the total quality of the drug user and to the range of circumstances in which it controls his behavior.

Addiction may be explained with three important concepts: tolerance, physical dependence and psychological dependence. As the user body adapts to the drug, he or she develops tolerance. Such person needs increasingly higher drug in order to become intoxicated. When the user's body becomes totally dependent on the drug with its prolonged use, the condition is defined as physical dependence. The body becomes so used to functioning under the influence of the drug that it is able to function normally only if the drug is present. Psychological dependence is a state characterized by emotional and mental preoccupation. With the effects of the drug and by a persistent craving for it. the user gets mentally "hooked on" to the drug. If the intake is abruptly stopped, the body becomes 'confused' and 'protests' discomfort through convulsions, depending on the type of drug abused.

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Classification of Addictive Drugs : The psychoactive drugs most commonly associated with abuse and dependence in our society appears to be.

1.	Narcotics	-	Opium and its derivatives
2.	Sedatives	-	Barbiturates
3.	Stimulants	-	Amphetamines
4.	Mild tranquilizers	-	Meprobamates
5.	Hallucinogens	-	Marijuana

Caffeine and Nicotine are also drugs of dependence, but they are not included in the APA classification. Addicts in different countries normally use these drugs.

Projective techniques have been used on various populations for behavior assessment. The utilization of vague, ambiguous, unstructured stimulus objects help to elicit the inner world of the subjects. Rorschach inkblot test is the most popular projective technique used as a tool of personality assessment and diagnosis. The Inkblot images have been found successful in hearing the inner cry of the suffering individuals (Cassell and Dubey, 1997).

Objective

To study the personality aspect of drug addicts.

Sample

The present study was conducted on 7 male drug addicts. It was an incidental purposive sample of drug addicts who are regularly taking narcotic drugs at least for the last one-year and are taking treatment at Drug de addiction centers at least for two weeks. They were in the age range of 20 to 30 years.

Discussion

The Rorschach's Inkblot test has revealed the inner psychological state of the subjects, which they refuse to acknowledge otherwise. The increase in total number of responses suggests their productivity and imaginative ability. Low number of Popular responses along with increased Animal contents suggests their poor contact with reality, frustration and hostility. However, moderate number of Whole and Detail location responses suggests their organizational ability. The low number of Human contents reveal their poor interpersonal relationship, which is often found in drug addicts. As a whole the protocol indicates their introversive balance.

Fear and anxiety are clearly revealed in responses like ferocious animal, a big black cloud covering everything etc. However, they have not lost their hope for better future and have given good responses such as garden, lawns and fountains etc. Blood and vista responses denote their hostility and insecurity. The high number of color responses reflects their poor control over emotional situation and to the extent aggression.

Table 1

Rorschach Responses Summary Chart							
SUBJECT	1	2	3	4	5	6	7
AGE	24	22	28	21	30	22	23
TOTAL RESPONSES	62	53	32	46	40	57	42
LOCATION							
W	22	6	6	12	11	17	8
D	33	38	19	22	23	31	28
Dd	5	8	5	7	6	6	5
S	2	1	2	5	—	3	1
DETERMINANTS							
F+	26	17	11	18	15	17	14
F - M	29 1	13 6	8 2	11 5	11 3	13 7	11 4
FY	3	5	—	3	4	8	6
C	2	8	4	6	4	8	5
V	1	4	2	3	2	4	2
CONTENTS							
H	7	14	6	11	12	15	10
A	25	18	15	15	18	20	22
Hh	8	2	4	6	2	5	3
Bl	1	1	—	2	2	3	2
An	1	2	2	3	1	4	2
Cg	5	1	2	1	—	—	1
LS	2	3	2	3	3	2	1
Sx	2	3	—	5	—	3	1
Others	11	9	1	—	2	5	—
POPULAR	15	4	8	6	7	10	11

Conclusion

It can be concluded that the drug addicts in this study are anxious, have poor control over emotional situations and lack of contact with reality.

Reference

Lemkau P, Kronerberg, Mannual of Rorschach Diagnostic Test (10th Ed.)

Cassell, W.A. and Dubey, B.L.(1997) SIS -II / Video Manual. SIS Center, 4501E, 104th Ave, Anchorage, Alaska-99516 (USA).

Mitra, G. and Mubhopadhyaya, A. (2000) Psychological Factors in Drug addicts and Normals. A Comparative Study. SIS Journal of Projective Psychology and Mental Health, 53-78.

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Management of Stress

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Stress has become the part of executive's life. Factors leading to stress may vary from faulty learning, conflicting objectives, unclear philosophy of life, false ego and fast changing values of society. It hampers productivity and interpersonal relationships. Various techniques helpful in the management of stress have been discussed in the paper.

With the rapid pace of advancement of science and technology and the advent of modernisation, human life has become very complex, resulting in social tensions and psychological disorders. The present miserable conditions of society and its mental health are alarming. Tension, stress, anxiety and depression have become a part of life. The causes may vary from faulty learning, conflicting objectives, unclear philosophy of life, false ego and fast changing values and norms of the society.

When we talk of modern managers, it is disturbing to think of their medical profile. About 30 percent managers are suffering from hypertension and are unable to take care of themselves and their families. On the other hand, life without stress would mean a dull experience. Stress is the spice of life and an optimum level of stress is necessary to live happily.

Stress is not always dysfunctional. Some stresses like stress for creative work, entrepreneurial activities and keen competition etc. stimulate better productivity. The present paper aims to discuss the factors leading to stress among the modern executives at their work place and measures to manage the stress.

Factors Leadings to Stress

Over Ambition : It is good to be ambitious, but being over ambitious in relation to one's capabilities has many pitfalls and non-achievement of the unrealistic goals set by oneself would result in stress. Type A personality people and those with extremely high work ethics almost burn themeselves out.

Work Pressure : You may be achieving outstanding results, which might result in pushing your body too hard. By working for long hours a day would hardly leave any time for rest. This causes energy to draw from your system.

Meeting Deadlines : Sometimes we lay down a highly unrealistic and amitious time frame for our tasks. Alternatively by frequent procrastinating, we feel terrible pressure of time to meet deadlines. In both cases, there is an avoidable tension and stress.

Inadequate promotion and growth opportunities : It is a natural instinct among employees to look forward to opportunities for growth in their organisation. When the organisation policy hampers promtion and growth opportunities, the result is frustration; leading to stress.

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Inter-Personal Relationship : Today's employees are enlightened and managing them effectively requires a great skill in inter-personal relationships. Exeuctives lacking in this important art would encounter strained relationship with their sub-ordinates, peers as well as the superiors, resulting in conflict.

Cliques' Politics at Work Place : There are cliques among employees in almost every organisation and the executives caught in the whirplool of petty politics, besides causing irreparable damage to their organisation, and peace of mind.

Insecurity of Job : The organisation' policy of hire and fire as "Damocle's Sword Hanging on the Neck" brings an unavoidable tension among the executives regarding security of their jobs.

Change in Environment : It is customary in public as well as private sector organisation for business executives to be transferred from one place to another.

There are many executives who are unable to cope with the changed environment and suffer from physical as well as mental symptoms. They develop disturbed sleep, loose their appetite and begin suffering from palpitation and severe headaches. Their performance goes down day by day.

Excessive Commuting Time : Unduly long commuting time especially for long distance suburban areas to the office coupled with the noise pollution and erratic trafic also causes tstress, particularly of the who come often late to the office.

Coping with stress

Stress is the essence of life. It is the noblest of nature's gifts to man. Executives should, therefore, learn to use stress to their advantage so as to lead a healthy and well-balanced life. Some important aspects for coping with stress are discussed in the succeeding paragraphs.

Know Your Ability to Tackle Stress

All of us, depending upon our upbringing, childhood, expeirences, nutrition and the type of training we have received can take on varying degree of strees. A rubber strip is elastic up to a point, beyond it, it snaps. Every individual also has a breaking point and should not go beyond it. Therfore, it is essential to recognise the amout of stress and strain we can take in our stride.

Positive Thinking : While a great deal of attention is paid to physcial exercises for development of the body, mental exercises for the right mental attitude are given very little importance by most executitives. It is ultimately the mind which controls the body and negative thoughts. Positve thinking helps in controlling and leading to good mental health depressing frustrating and negative thoughts.

Goal in Mind : It is essential that all of us should have a goal in mind and pursue it with determination. It is important that the goal should be within one's reach and one must

never be impatient about trying to reach it.

Relaxation: Impact of stress can be overcome by relaxation. This, infact, is one of the greatest luxuries in life and you cannot afford to miss it. Relaxation is a joy of life. How to relax is explained ahead.

“Close your eyes and let your concentration go on each part of your body in turn and that would result in relaxation of that part. Begin with the nape of your neck and your head. Pay attention to your jaws and release them. Release your facial muscles - nose,eyes and brows. Relax your shoulders, arms, elbows,wrists, hands,fingers and thumbs.

After that relax your chest, your breathing, stomach, your back, spine and buttocks--than your legs,ankles and the soles of your feet. Once you are so relaxed that you feel your body to be like a sack of potatoes.

You could do the above process by sitting in your chair relaxed, remove your shoes with your feet flat on the ground and your hands resting on your knees in a comfortable position.

Now turn your attention to your mind. We have to remind ourselves that mental relaxation is a luxury.

Do it this way

Say to yourself-as I count FIVE; I am relaxing more and more deeply in my mind.

One (pause): deep relaxation

Two (pause) : deeper

Three (pause): very deep

Four (pause) : deeper still

Five (pause) : deepest, total , profound relaxations

Imaging Therapy

Another way of mental relaxation is by Imaging Therapy. Close your eyes and imagine your flying in the air like a bird. you are going up and up ; exploring new areas, seeing different places with the world below you.

And you feel great.

And now you are passing through a beautiful garden with lovely flowers, the kind you have never seen.

You imagine yourself as a boy on a beautiful Mediterranean beach in the sun, with lot of people there or imagine yourself as a man fishing in the boat.

Some other ways of relaxations are:-

1. **Talking**
2. **Being in good company**
3. **Careful Living**
   - (a) Eating habits
   - (b) Sleeping habits
   - (c) Reading
   - (d) Entertainment /Music - Use the soothing beauty of great music to calm your nerves.
   - (e) Exercise- Walk,work in a garden, play golf; knowing that physical tiredness invites relaxations and sleep.
   - (f) Pursuing Hobbies
4. **Meditation/Prayers**

Meditation has been recognised as a powerful technique for reducing stress. meditation involves quite concentrated inner thoughts in order to rest the body physically and emotionally . Transcendental meditation is one of the more popular practice, meditator tries to meditate for two periods of fifteen to twenty minutes a day, concentrating on the repetition of some mantras like “OM” or “WAHEGURU”. Any meditation essentially involves a relatively quiet environment a comfortable position, repetitive mental stimulus and a passive attitude.

Unbutton Your Emotions : Many people deny the expression of joy and pain. The pent up emotions inside need a vent or it may burst out without warning, thus spoiling relationship with others.

Conclusion

Stress is a part of life and cannot be avoided. One should learn how to manage it. Various relaxation techniques are useful in its management.

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Need & Press Among Children of Working Females

Meenakshi Mathur and Ravi Gunthey

The present investigation attempts to study the Need & Press, among children of working females. It is hypothesized that children of working females will differ significantly from the children of non-working females on several needs. In the present investigation Child Apperception Test (CAT)- Bellak and Ballak (1949), which was adaptated by Uma Choudhary in 1974 was used. A sample of 80 children of working females and 80 children of non-working females were selected. The children of working females are different significantly from children of non-working females on Child Apperception Test.

The need pattern of kindergarten children and found that art products of the artist have their significance in understading of the unconsious mind, 'inner working of mind that reflects the deep scaled feelings, desires and needs of children'. It also expresses the repressed mysteries and demands of the individual's which are unsatisfied and unfulfilled. Spontaneous drawings, story writings, paintings, songs and speeches are some of the projective techniques to provide relief and satisfaction to such individuals. He also expressed that art production of normal person must vary in degree from abnormal one. Distorted human figure in story refers to mentally defective individual and arts production is reflection of both past and present of an individual. Bambara (1999) working mothers start out with an irreplaceable bio-emotional advantage in relating to ther infants when they are reared by them. When they are sent to nurseries and daycare centers it does not meet child's Needs. The extended time in daycare due to mother's employment is likely to damage a newborn's development. Leach and Eyer (1997) Needs of the growing child requires the mother to loosen her hold on the child and this task may be easier for the working women whose job is an additional source of identity and self-esteem. Santrock (1996). A comparison of children of working and non-working mothers, on Adjustment, Frustration, Level of Aspiration and Achievement. when made, differences in some personality characteristics such as reaction to frustration and level of aspiration between the two groups of children Jain (1990).

Statement of the Problem

The present investigation attempts to study the Need & Press, among children of working females. It is hypothesized and children of working women will differ significantly from the children of non-working women on needs like affiliation, Achievement, Dominance and pressure like Dominance, Affiliations, Lack and Loss. The motives, trends and feelings among children of non-working women will differ from the other group becasue of the availability of their mother.

Test

Child Apperception Test (CAT)

In the present investigation Child Appercption Test (CAT)-Bellak and Bellak (1949) which

was adaptated by Uma Choudhry in 1974 is used. It has slight modification in the pictures which were suitable to Indian conditions and culturally relevant.

Sample

The incidental purposive sampling technique is being used in the selection of a sample 80 children of working women and 80 children of non-working women were selected from by and large similar type of school of Jodhpur city and all of them were from 3rd and 4th standard.

Result and Interpretation

Categories		DM	PID	IDEN.	CAT
	Mean	68.82	7.45	3.81	79.48
Children working mothers SD	29.74	5.01	1.39	34.15	
	Mean	61.87	5.36	2.8	70.49
Children non-working mothers	SD	34.68	4.36	2.22	38.73

Table 2. Showing 't' value on Child Apperception Test of group among children of working and non-working mothers.

Categories	D.M.	P.I.D.	IDENT.	CAT
Children of working mothers (N=80)				
V/s	1.36	2.81	3.45	1.56
Childern of non-working mohters (N=80)	NS	**	**	NS

** P<.01, NS - Not Significant., DM - Defence Mechanism., PID - Phobic, Immature, Disorganized., Ident. - Identification., CAT - Total Child Apperception Test Score.

As per Table 2 the children of working mother are different significantly from children of non-working mothers on Child Apperception Test i.e, PID (t= 2.81, p<.01) and Ident (t = 3.45, p<.01). This shows that children of working and non-working mothers are significantly different on Phobic immature disorganized behavior. Their own identification with same sex parent of opposite sex also differs significantly. This means that these two categories children are different in Fear, Anxiety, Regression, Control, being jealous or being loved by parents of same sex or parent of opposite sex. While children of working and non-working mother showed no significant difference in Defense Mechanisms DM (t = 1.36) and Total Child Apperception Test score CAT (t = 1.56). This reflects that children of both the groups are same on rebellion, stubbornness, isolation, regression, denial deception etc. Though mean value of children of working mother are

slightly higher than non-working mohters on both DM category and Total CAT scores.

The purpose of the present study was to see the difference between need pattern of children of working and non-working mothers. The review of the study conducted in this area evidences that parental attitude including child rearing practices and their feeling of acceptance, rejection towards the child plays an important role in the development of the personality of the child. In the present study children of working mothers perceive maternal rejection may be due to their busyness. Motives like 'Dominance', 'Aggression' and 'Hetersexuality' found higher among these children, it may be due to the feeling of perception of rejection, which may lead to frustration and tends to be non-conformist. These children have also expressed violation of maternal norms in their stories. On the other hand children of a non-working mother perceived maternal acceptance higher than the working mother. Motives like 'Achievement', 'Acceptance', 'Affiliation' and 'Endurance' were also reported higher among the children of this category. They prefer to put the things in an order as the family norms. Children of working females feels less affiliated with their parents and as a result obtain lesser score on 'Order', 'Abusement' and 'Endurance'.

Present findings are in the line of study of Mishra (1998) in which he has reported that perceived maternal acceptance- rejection influences the motivational pattern of the child. The significant difference on eight motivational patterns was reported i.e., Achievement, Order, Affiliation, Dominance, Abusement, Endurance, Heterosexuality, and Aggression. However, on Motivational Pattern, Deference, Exhibtion, Autonomy, Intraception, Succourance, Nurturance and Change, the two groups of the subjects were not found to be significantly different from each other. Similarly, findings of Bambara (1999) is also supported by the above views.

Reference

Bambara, R. (1999). Spontaneous drawing as related to children's need (Psycho-Linguistic Association of India, Agra, Vol. (29)2.

Bellak, L. and Bellak, S.S. (1949). A manual for the Children's Apperception Test. (Animal Figures). New York, C.P.S. Inc.

Choudhry, U. (1974). Indian adaptation of Children's Apperception test of Bellak. Delhi, Mansayan.

Jain, M. (1990). The impact of adjustment, frustration and level of aspiration on the children of working and non-working mothers. Ph.D. Edu. Agra University.

Leach, P. and Eyer, D.e. (1997). Women's behavior : Do mothers harm their Children wehn they work outside the home ? Women and Men and Gender ; On going debates. Walsh mary Roth (Ed.) Yale University Press, New Haven

Mishra, R. (1998). Motivational pattern as related to perceived maternal acceptance-rejection. Indian Journal of Psychology, New Delhi, 73 (3 & 4).

Santrock, J.W. (1996). Child Development. London, Brown and Benchmark.

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