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SIS

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Dr. B.L. Dubey, Editor-in-Chief
SIS Journal of Projective Psychology and Mental Health
E-mail : sisdubey@hotmail.com
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# Editorial

## Application of The SIS Board

Projective instruments are an integral part of my psychological assessments. I routinely use at least one instrument that requires the examinee to tell a story based on ambiguous pictures, such as the Thematic Apperception Test (TAT) or Robert's Apperception Test (RAT). I also use the Rorschach Psychodiagnostic Plates with the Exner or Klopfer interpretive protocols (or both).

For the past few months, I've been using the Somatic Inkblots in addition to the above measures. I've found that overall the diagnostic material obtained by the Somatic Inkblot Board (SIB) is similar to what I obtain from other test instruments. At times the Rorschach and TAT seem threatening. I can tell there are strong reactions to particular images due to changes in facial expression or posture, but the examinee is unwilling or unable to verbalize what they are experiencing.

The Board version of the SIS that Dr. Cassell and I developed this year has been useful as both a diagnostic and therapeutic tool with several patients. This version of the SIS consists of a single 20 cm x 29 cm 'Foam core' board with all 62 SIS images printed on it. Each individual image is approximately 3 cm x 3 cm.

The small size of the individual images is not perceived as threatening and the patient seems able to focus on the image for a longer time in order to discuss the image longer than with a larger image.

A sixteen year-old female patient was unable to provide a valid Rorschach or TAT because she became agitated and tearful during the test and would not discuss her perceptions.

I showed her the board format SIS and suggested that it resembled a strip of photographic or video film. I suggested that perhaps she could put some of the images together to make a story or movie storyline about anything she wanted.

She was intrigued with this idea and chose four "good scenes" and three "bad scenes" from the SIS. We discussed that a story had a beginning, middle and end. For a therapeutic homework assignment she wrote her "screenplay".

Her "film" would begin with block 5. This would be a happy loving person, dancing with happiness. The story moves to block 3, where the happy dancing person's heart is wounded, and block 13 where the heart is scarred and ugly, and block 50 (Card 19B) which represented how ugly the whole world seemed when there was a broken heart. Block 36 (Card 5B) was talking about how ugly she felt. Block 61 (Card 30B) was feeling stronger and realizing that may be everything did not have to be ugly. Block 59 (Card 28B) was where the person was feeling stronger and warmer in the light. When she was finished telling me about her screenplay, she stopped suddenly, and said this is my story!

I agreed that of course it was her story since she created it. She said, “No, this is my story!” It’s about me! Her disclosure led to a very fruitful therapy session.

The SIS allowed her to step outside herself long enough to put her history in an order that made sense to her. This young girl has a history of physical and sexual trauma. She has been diagnosed with anorexia nervosa with binging and purging behaviors. Therapy has been pretty much unsuccessful for almost three years.

By creating a story with the SIS images, she accessed material that was too difficult to admit and allowed her to begin to gain insight into her behavior. I believe these images and this technique will continue to help this young lady make therapeutic progress. In the article that follows this one, Dr. Cassell discusses how the SIS and the SIS Board were used with another patient.

Deborah A. Mohn, Ph.D.
Licensed Psychologist (AK-484)
President, Alaska Psychological Association
(907) 563-5278
debmohn@gci.net

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# Symbolism in Violent Hallucinations

**Wilfred A. Cassell, Ann M. Schaeck and Deborah Mohn**

In this case history study, the Somatic Inkblot Series Video, Rorschach Inkblot Test and Figure Drawing tests were administered to a 15-year-old girl who was admitted to a psychiatric hospital in Boston for treatment of Major Depression and Dissociative Reaction. She had history of suicidal ideation and self-multilation of her left wrist and forearm. The relaxing instructions in the video and the hypnotically present healing flowers may have facilitated neural extinction of the terrifying hallucinations intruding upon her consciousness. The Figure Drawing and Content Analysis of SIS and Rorschach may provide useful aides to supplement standardized clinical interviewing techniques. The case has been discussed in detail.

My Scars

*These scars upon my wrist*
*Are beautiful to me*
*What the world looks at with shame*
*I view with joy and pride*

*These scars upon my wrist are mine*
*I put them there*
*They are some gift*
*That no one can take away*

*These scars upon my wrist*
*Are my reminders*
*Proof that I can feel happiness*
*Despite all the sorrow that consumes me*

*These scars upon my wrist*
*That you look upon with disgust*
*Could someday be owned by you*
*Could someday bring pride and joy to you*
*Could someday be scars upon your wrist.*

The study of hallucinatory phenomenon has long proven of interest. If there is a common clinical bias in evaluating hallucinations, it is the assumption that these perceptual disturbances are evidence of abnormalities in brain chemistry. There is a great deal of supporting evidence for this viewpoint, especially in those with disease of the central nervous system or toxic conditions involving the brain (e.g. chemical induced hallucinatory states). This case history presentation explores the notion, that when there is no clear evidence of neurological dysfunction, the clinician may glean important diagnostic information and novel therapeutic leads by exploring the symbolism in the hallucinations.

This case history presentation involves a fifteen-year-old girl who was admitted to a psychiatric hospital in Boston for treatment of Major Depression and Dissociative Disorder. Prior to admission, she had experienced severe suicidal ideation with plans involving a variety of suicidal behaviors such as overdosing; slitting her throat, electrocution etc. Her usual behavior involved self-mutilation of her left wrist and forearm. While she had experienced suicidal ideation from the time she was severely abused by a violent biologic father.

Wilfred A. Cassell, MD, Director, Deborah Mohn, Ph.D. President Alaska Psychological Association (debmohn@gci.net) and Ann M. Schaeck, SIS Center, 4501E, 104th Avenue, Anchorage, AK 99516 (USA), E-Mail : drcassell@gci.net

Her pattern of mutilation had only started after she had been removed from high school seven months earlier by her mother and stepfather. Even though she had been made to do home school, she retained communication with a teacher who had been especially supportive of her interests in drama and writing. When she revealed to him her suicidal thoughts, he contacted mental health services who referred her for hospitalization. Her parents initially refused to accept the fact that she had hallucinations and was a danger to herself.

During the initial psychiatric evaluation, she reported that she had previously drawn a colored representation of a reoccurring violent visual hallucination. This was a threatening man with a knife in his hand.

Her representation of the figure revealed that he had cut his wrists. Red blood poured from the wounds. When asked to recall who he reminded her of, she said that it brought to mind her abusive biologic father. Upon detailed questioning about her drawing, she told the interviewer that the eyes resemble “mine”.

She was selected for this illustrative case study because she provided a unique opportunity to examine hallucinatory symbolism prior to psychotropic medication. Because she was quite intelligent, she was an excellent subject for the illustration purposes. She was intelligent with excellent writing skills in poetry and drama. Previously when enrolled in school, she had demonstrated ability in school drama activities to communicate effectively. However, consistent with her longstanding Dissociative symptoms, she had extremely limited concern in the expression of personal feelings. urther relevant clinical history will be provided subsequently in connection with her projective test results.

On the second day of hospitalization she was administered the video version of the Somatic Inkblot Series (SIS). The image that she rated as most threatening was 1B. A transcript of the detailed enquiry follows:

Dr. Cassell : Now we’re going to go to 1B. On the answer sheet you indicated that it frightened you to think something was trying to bring you down. And you saw “a claw reaching out from the depths to drag you down”. Did you want to say more about that?

Stephanie : No.

(This projective response incorporates an image of a " Claw" which in disguised form symbolizes the hallucinatory figure's knife)

Dr. Cassell : When — when have you felt that way? That something’s dragging you down?

Stephanie: A lot of times. Like when I do theater and someone isn’t so accepting about it. That kind of drags me down (Her parents were adamantly against such activities).

Dr. Cassell : Hm hm.

Stephanie: It’s just small stuff like that.

Dr. Cassell : Do you think that image, — that person in the hallucination brings you down?

Stephanie: Yeah.

Dr. Cassell : Yeah. Tell — tell me about that. In what way does he bring you down?

Stephanie: He shows me the way that — a path that he chose (Suicide by cutting his wrists), I suppose, that is also a path that I've — I've considered. And the fact that it scares me kind of brings me down.

Dr. Cassell : And he chose what path?

Stephanie: Suicide.

Dr. Cassell : In what way have you considered suicide?

Stephanie: Slitting my wrist the same — same way he did. (As will be shown in her free associations to subsequent SIS images), Stepahanie had been serverely traumatized by her biologic father, and had partially identified with "His violent personality. This identification was reflected in her comments about the eyes in the figure resembling her own.

Next her associations to SIS 21B will be explored for symbolic content. She had rated this image as third most threatening.

Dr. Cassell : Okay. For 21B you said: "Anything that hurts nature angers me". Okay. It angers me too. And you see.....

Stephanie: "An oil rig digging into the beautiful earth to suck her dry". (Here the symbolism again relates to self mutilation with the "earth" symbolizing her body)

Dr. Cassell : And what does that bring to mind.

Stephanie: I don't know. It just — it brings to mind a disruption in — in the beauty. I mean.....

Dr. Cassell : Right.

Stephanie: Nature and earth is so amazing, and it's so inspirational and the fact that some.....

Dr. Cassell : Especially the beauty in Alaska, right?

Stephanie: Yes. Oh definitely. And — and just the fact that something can damage that is upsetting.

(Here, she totally avoids the imbedded structure of a hand gun and substitutes an image of an oil rig digging into the beautiful earth. Again this depicts the knife in the hand of the hallucinatory figure. The power of this symbol to emerge in projective consciousness is immense. No recognition of the gun takes place, yet a few minutes earlier in viewing 11A, consistent with her violent impulses, she had projected the response "Gun").

The next response that warrants projective analysis was produced in regard to her viewing 22B. Here she envisioned a "person sleeping with dreams so disturbing it causes them illness" Consistent with this, in association with the visual hallucinations of a figure with a threatening knife; she had recurrent posttraumatic dreams in which a similar figure slashed his own wrists and then chased her.

In this regard, the violent hallucinations simply reflected a spillover into conscious

awareness of the violent night time imagery and emotions. Sometimes, the violence in dreams was directed at her friends as illustrated in her response to SIS 22B.

Dr. Cassell : Then 22 B. "A person sleeping with dreams so disturbing it caused an illness". And what does that bring to mind?

Stephanie: Myself.

Dr. Cassell : What way are your dreams disturbing?

Stephanie: They're horribly violent.

Dr. Cassell : What sort of violent images come to mind?

Stephanie: I recall a friend of mine getting killed because a bowling ball fell on his head.

Dr. Cassell : What were the images like in the dream?

Stephanie: They were real looking. What do you mean? I'm sorry.

Dr. Cassell : Well, what did you see with it? Did you see the ball hit his head? Was there blood?

Stephanie: Yes, there was bones and blood and.....

Dr. Cassell : And how did it affect you in the dream, emotionally?

Stephanie: It hurt. I mean I cried and I was.....

Dr. Cassell : It was horrible wasn't it?

Stephanie: Yeah.

Dr. Cassell : And you wake up feeling how?

Stephanie: "Helpless" This brings to mind those theoreticians who conceptualize of certain depressions as resulting from "learned helplessness")

Dr. Cassell : How long does that feeling last in the morning?

Stephanie: It lasts throughout the day.

Dr. Cassell : Colors the whole day, right?

Stephanie: Yeah.

(Even though this was a horribly disturbing dream, she still was able to recall it, since it was much less anxiety provoking than her terrifying dreams of the knife threatening hallucinatory figure).

Next attention will be given to her reaction to 15B the only SIS image that had embedded structure of knife like sharp objects

Dr. Cassell : Okay. 15B."Knives being thrown at someone to cause them more pain" What does that bring to mind?

Stephanie : Me.

Dr. Cassell : In what way you?

Stephanie: Because sometimes the pain that I feel it — it feels like somebody's taking a knife and stabbing me(Here, she compares her somatic pain in terms of a knife stabbing her).

Dr. Cassell : Where do you feel it in your body?

Stephanie : In my stomach and in my ribs and my heart (Diagnostic medical studies had not revealed any physical problems to account for her discomfort. Consequently it was assumed that they represented Conversion Reaction symptoms related to her Dissociative Disorder).

Dr. Cassell : What does your stomach feel like at that point?

Stephanie : Oh, it feels horrible. It's — it's just — it's burning and it's — I don't know. It's just sharp pain.

Dr. Cassell : And then your heart, what does it feel like?

Stephanie : Same thing.

Next the detailed inquiry in regard to SIS Images 10A and 12A will be explored in terms of their related body symbolism.

Dr. Cassell : Right. And 10A?

Stephanie : I don't know. It just looked like somebody who is sad and in pain.

Dr. Cassell : Does it remind you of the pain that you have?

Stephanie : Yeah.

Dr. Cassell : What's the pain like that you have inside?

Stephanie : It's hurtful.

Dr. Cassell : And where do you feel that?

Stephanie : Everywhere.

Dr. Cassell : Yeah. More in your chest or just everywhere?

Stephanie : Sometimes.

Dr. Cassell : What's your chest feel like?

Stephanie : It feels like sharp shooting — well, it feels like somebody's stabbing me.

Dr Cassell : 12A What does this bring to mind?

Stephanie : An ear with blood in it. (The blood response projected here is quite consistent with knife bleeding).

As will be shown subsequently, Stephanie was a victim of severe childhood psychological, physical and sexual abuse. Associated with the resultant traumatic events she had blocked from conscious awareness many of the events along with their related painful affects. Consciously, when triggered by current stressful life events, these were experienced as somatic pain.

Next, her response to 27B will be outlined.

Dr. Cassell : 27B. “Self reflection. Evil, but completes half versus a pure, but damaged half”. And what does it bring to mind?

Stephanie : It brings to me — to mind myself and — and like the darker half winning over the better half.

Dr. Cassell : What is the lighter part of you like?

Stephanie : What do you mean?

Dr. Cassell : The good part.

Stephanie : What is it like?

Dr. Cassell : Yeah.

Stephanie : Happy.

Dr. Cassell : And then the dark part, what its like?

Stephanie : Controlling, dominating, hurtful.

In interpreting the symbolic significance of human content in visual hallucinations, it may be inferred that the figure symbolically represents an aspect of the person’s own self. For Stephanie, the male figure of the hallucination symbolized both her father and her violent tendencies. The latter resulted from her learning aggressive behavior from her abusive father (i.e. mutilating her wrists). Of course, genetic factors may also be determinants.

Next, historical information of childhood trauma follows in regard to her associations to 22A :

Dr. Cassell : 22 A. “Someone moving to destroy or damage someone”. What’s that bring to mind?

Stephanie: The way people are affected by certain things.

Dr. Cassell : Hm hm. When you were really young were you exposed to much violence or hurt?

Stephanie: Yeah.

Dr. Cassell : What was it like?

Stephanie : Hard. It was painful.

Dr. Cassell : Who was doing the hurt?

Stephanie: My dad for the most part.

Dr. Cassell : In what way did he hurt you?

Stephanie: He would hit us and throw us against the wall. And stuff,(Her mother reported sexual abuse, although at this stage in her psychotherapy with her female therapist she was amnesic to this early trauma).

Next, her comments about 18A are relevant to understanding how the dissociation process fragmented her personality.

Dr. Cassell : Hm hm. 18A. “Someone captured inside a prison they created for themselves”. What’s that make you think of?

Stephanie: Me.

Dr. Cassell : What way you?

Stephanie: Because I have problems with communication. And it seems that I just have barriers that I put up.

Next her discussion in relation to 4B throws light on her distorted cognition presented in her mutilation poem presented at the beginning of this article.

Dr Cassell: 4B “A reflection of a person’s true self without the mask they present”. And what does that bring to mind?

Stephanie: Me (Before exploring further her associations, perhaps it might be helpful in consider two drawings that she made for her female psychotherapist).

It may be observed that one drawing depicts her exterior with a flower showing. The other presents a troubled interior with a peace symbol that is burning. Above it are tear drops symbolizing her sadness and inner cry.

Dr. Cassell : What way does that reflect you and your mask?

Stephanie: Because one of the images is a lot uglier than the other one.

Dr. Cassell : Uh-huh. In what way do you have an ugly image?

Stephanie: That would be the image that I don’t present. It’s distorted over things that have happened.

Dr. Cassell : Such as?

Stephanie: Such as my dad being mean, or something as little as Jessica leaving (One of the losses that precipitated her current depression was Jessica’s moving away. They then communicated frequently by e-mail. Eventually Stephanie shared her self mutilation secret with Jessica. Jessica, in turn then sent her the drawing indicating that she too found “Peace through cutting” poem with Jessica about her self mutilation, that she also did the same).

Dr. Cassell : Hm hm. And so that person is a person who’s feeling what?

Stephanie : Pain.

Dr. Cassell : Pain. Yeah. And how about hurt and anger, too?

Stephanie : Yeah.

Dr. Cassell : What’s the anger aspect?

Stephanie : The anger at themselves.

Dr. Cassell : And how does that relate to wanting to cut on you?

Stephanie : Part of the reason I cut myself is because of the anger I feel towards myself.

Dr. Cassell : To what affect does it have when you see your blood during cutting?

Stephanie : It sees something being released.

Dr. Cassell : Hm hm.

Stephanie : Something being set free.

Dr. Cassell : Somehow — there's some emotional release with it?

Next, her response to 20B depicting a human brain portrays her distorted cognitions and auditory hallucinations.

Dr. Cassell : 20 B. "Someone's brain destroyed in parts". What does that bring to mind?

Stephanie : Me.

Dr. Cassell : In what way do you feel your brain is destroyed at times?

Stephanie : My lack of concentration now. And my inability to recall things that happened to me three days ago. In Dissociative Disorder, amnesia is a common symptoms relating to overriding attempts of her mental defense system to obliterate emotional suffering.

Dr. Cassell : Right. And when you have these visions — how does that feel in your brain?

Stephanie : It feels damaged.

Dr. Cassell : And then the visions you — you see things, and — and do you hear things at times as well?

Stephanie : Yeah.

Dr. Cassell : What do you hear?

Stephanie : Jumbled noises.

Dr. Cassell : I see. And how do those affect you emotionally?

Stephanie : They kind of throw me off and upset me for a bit, until I can like try and regain myself.

Dr. Cassell : Can you ever make out the voices, whether mans, women's, you know?

Stephanie: It just sounds like everybody is jumbled.(These auditory hallucinations are of concern. They could indicate that she was suffering from the early stages of one of the Schizophrenic Disorders).

Next, her responses to 29B and 30B are of interest because they provide an opportunity to assess, through the mechanism of projection, how her hallucinations affect her. This additional aide in assessment was clinically important. Initially, neither her mother nor stepfather would believe her or the hospital staff that she was truly hallucinating.).

Dr. Cassell : 29B "Someone running from their fear". What does that bring to mind?

Stephanie: Me. I run from everything.

Dr. Cassell: When do you feel fear and anxiety?

Stephanie: A lot of times. Just out of the blue, sometimes, I'll be really scared and — and when I hallucinate I feel scared and just — yeah.

Dr. Cassell: 30 B. "Two ears each hearing something differently". And what does that bring to mind? (This depiction of human ears is particularly useful. It enables those suffering from auditory hallucinations the opportunity to communicate about their suffering. The material which follows more sharply brings into clinical focus her dissociated mental processes).

Stephanie: Everybody. Everybody seems to hear something different. And sometimes they hear two different things that weren't even intended and.....

Dr. Cassell : Do you ever hear things like that confusing in your head?

Stephanie: Yeah.

Dr. Cassell : Tell us about it.

Stephanie: Sometimes I hear things telling me what a bad job I'm doing, and everything.

Dr. Cassell : Put down things?

Stephanie: Yeah.

Dr. Cassell : How does that affect you?

Stephanie: Really bad. It makes me feel weak.

Dr. Cassell : Do you ever hear things telling you to hurt yourself?

Stephanie: No (Here. She reveals, by elimination of suicidal voices, that it is primarily the visual hallucinations which contribute to her mutilating behavior).

Stephanie was tested with Rorschach one week after admission when she was still having hallucinations. The report read as follows: "Stephanie's responses to the Rorschach cards were first scored with the Exner scoring technique. Mostly her responses were scored within normal parameters. At the time of this assessment, she appeared somewhat depressed, but not necessarily suicidal. She did, however, appear susceptible to episodes of affective disturbance that may involve features of worthlessness and confusion. She tends to make decisions based on how she feels rather than on what she thinks, although she tends to be confused and uncertain about how she feels much of the time. She appeared to be experiencing considerable emotional stress that was interfering with pleasure in life and making her susceptible to becoming even more depressed and anxious".

"The contents of Stephanie's responses were interesting and seemed related to the contents of her hallucinations and dreams. One perception was of a "horrible, ugly giant with big, mean hands and huge feet". She described another as something "rough on the edges like something that's been cut up". Another was a "scary face with an evil horrible grin with awful sharp teeth". These references were consistent with hallucinations featuring a man with a knife, cutting himself and threatening to cut her".

She was subsequently interviewed by Dr Cassell 30 days after her admission. She was asked the question: “Did you see anything in any of the Cards which reminded you of the figure in your visual hallucinations?”

Stephanie: Yes (selecting Card II), I see his face. There are his eyes (pointing to the blank space under the upper red colors).

Dr Cassell: Can you say anything more?

Stephanie: Yes, he is frowning.

Dr Cassell: How does that make you feel?

Stephanie: Lonely

Dr Cassell: What does the red on top resemble?

Stephanie: It looks like he is crying. His eyes are red.

**Discussion :**

Assessing the symbolic significance of hallucinations poses serious methodological challenges. Ideally, the clinical investigator should attempt to obtain valid and reliable data at the time the subject was experiencing a particular hallucination. These data could be compared with projective responses in the non hallucinatory state. While this may have appeal to those who champion scientific rigor, like dreams hallucinatory episodes are constantly in flux. Moreover, because of a variety of complicating factors - not the least of which is the individuals confused cognitive state and inability to clearly demarcate boundaries between actively psychotic and dormant psychotic conditions, such rigorous comparison are not always practical. In addition, the prime emphasis must always be on therapeutic issues. This case study has many limitations, active psychotherapy was going on over the course of treatment and psychotropic medication levels were being brought up to therapeutic levels.

In spite of such limitations, perhaps a general observation can be made which could provide guidelines for future clinical investigators. In the absence of clear-cut neurological illness, it may be hypothesized that direct and/or symbolic information that can be gleaned by the assessing hallucinations. In assessment, projective techniques such as figure drawing, and content analysis of the SIS and Rorschach stimuli may provide useful aides to supplement standardized clinical interviewing techniques.

In this case history study, the SIS-II Video was used on the second day of hospitalization when the hallucinations were frequent and intensely threatening. When Stephanie viewed the SIS evidence of their presence was only symbolically inferred from two of the three images that she rated as most threatening: Images 1B (“A claw reaching from the depths to drag you down” and 21B “An oil rig reaching into the beautiful earth to suck her dry”). While at the time, these were rated as quite disturbing, it could have been potentially much more disruptive to her fragile cognitive state if her mental processes had not employed symbolic defensive overlays blocking the intruding hallucinatory imagery of “The man with a knife”. Moreover, the relaxing instructions in the video and the hypnotically present healing flowers may have facilitated neural extinction of the terrifying hallucinations intruding upon her consciousness.

One week later she was responding well to treatment. Self mutilation impulses and visual hallucinations were infrequent, yet her Rorschach responses showed content consistent with the face of a threatening man. However, no specific inquiry was done concerning what her facial responses brought to mind. A month later in treatment, when she was given an opportunity to view all Rorschach plates laid out on a table in response to a specific inquiry she spontaneously indicated that the imagery evoked by Card II resembled the hallucinatory man's sad face with reddened eyes. Consistent with her clinical improvement, there was no reference to his cutting behavior; blood etc. and he seemed much less threatening.

In psychotherapy the following day, she was asked why she thought that he was sad. She said that she didn't know why. When asked if she felt sad, she immediately answered in the affirmative. Two days before, she had been crying profusely and was "red eyed" herself. As indicated earlier, hallucination represented a composite image of her abusive biologic father and her own dark side.

As she got in better touch with her sadness and emoted during therapy sessions, the visual hallucinations stopped. The imagery was replaced by her sensing the psyche presence of the man standing behind her. In a paranoid way, she imagined him to be contemplating touching her shoulder in what she feared would be in a menacing fashion. However, she envisioned that he no longer had a knife in his hand. At this time there was a reduction in her suicidal ideation and impulses to mutilate her wrists.

Her improvement was reflected in her writing a poem after a few weeks of therapy is given below.

*You constantly ask me*
*What it is I want*
*Well, now I will tell you*
*I want more than I deserve*

*I want to be inspired*
*And to cry because I am so truly thrilled to be alive*
*A reason to keep up the fight*
*To put the knife down*
*Or the extra pills up*
*To actually beg to live another day*

*I want to never worry about acceptance*
*To know that people love me*
*And to accept that it is not important to understand why*
*You asked me what I want*
*But it isn't easy to say*

*I want a lot*
*Though it doesn't always feel like enough*
*The only thing that I can tell you*
*With absolute certainty*
*Is that I want more than I deserve.*

Finally in considering the significance of hallucinations whose etiology is primarily not neurological, it might be useful to consider certain of the psychological origins of their symbolism. Like many adolescents who have experienced severe childhood trauma and develop Dissociative Disorder, Stephanie's mental defense system became disrupted. Thus she suffered from a breakdown of the usually integrated functions of consciousness, memory, identity and perception.

The latter disturbances involved both the outer world and of her body image. She had been depressed for years and long had experienced suicidal ideation. Death in her fantasies provided her a way out of her painful existence. Her self mutilation impulses were first acted upon when she was taken out of school. For her, this was a devastating attack on her fragile sense of identity. It shut off her outlet in regard to drama and writing - all things that her parents despised. Not being able to express her rage directly to them, she acted out her anger on her body. When she found the act of blood letting giving her an emotional release, she developed an almost addictive behavior to this.

Her internet friends reinforced this maladaptive self abusive behavior - as illustrated by the friend who sent her the “Peace through cutting” drawing. She also had so-called friends in cyberspace with suicidal behaviors that also had eating disorders. Consistent with familiarity to the latter, she responded to 7A as follows: someone trying to deal with an eating problem, trying to make healthier choices”. In the initial inquiry, she denied having this problem herself. However, in the second month of therapy, she finally revealed that after listening so much to their fears, she too had become concerned about her body image. Since self destructive behaviors can sometimes be readily transmitted from one person to the next, her internet “Chat room” was a highly dangerous place for this suggestible adolescent girl. This case illustrates why twenty first century clinicians need to inquire into internet activities in exploring determinants of violence.

**Conclusion :**

The SIS Video,Rorschach and Figure Drawing tests were administered to a 15-year-old girl who was taking treatment of Major Depression and Dissociative Reaction. The relaxing instructions in the video and the hypnotically present healing flowers have facilitated neural extinction of the terrifying hallucinations intruding upon her consciousness. The Content Analysis of SIS has helped in understanding the psychopathology of the problem and planning the therapeutic aid. The patient improved after a few weeks of psychotherapy

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# Manifestations of Dependent and Self-critical Personality Styles in Rorschach: an Exploratory Study

**Rui C. Campos**

The present work aims to study the manifestations of dependent and self-critical personality styles, following Sidney Blatt's perspective, in Rorschach, using Rorschach Comprehensive System. Rorschach was administered to a group with a self-critical personality style, to a group with a dependent style and to a control group. It was used the extreme groups' methodology. The participants were selected from a initial sample of 359 college students, using the result in the portuguese version of Depressive Experiences Questionnaire, and also in the portuguese version of Beck Depression Inventory. Discriminant analysis reveal that a group of four Rorschach variables appear to be the best differentiating the two styles, a group of four variables reflects the way self-critical style expresses itself in Rorschach and also a group of four variables reflects the way dependent style expresses itself. Variables of Comprehensive System seem to be useful in the detection and differentiation of two depression predispositional styles.

In Sidney Blatt's conceptualization dependency and self-criticism can be seen as two types of depression, two types of depressive experiences, two personality dimensions and also as two personality styles or characteriological types that can be considered vulnerability or risk factors to depression. Individuals with a dependent personality style or with a self-critical personality style are vulnerable to experience depressive states when stress-full life events occur. Dependent individuals are mostly sensitive to disturbing interpersonal events and self-critical individuals to disturbing self-definition and personal achievement events. When depressed, individuals with a dependent personality style present anaclitic depressions and self-critical individuals present introjective depressions. The two types of vulnerability have their origin in different moments of development, resulting from two specific types of disturbed relationship with parents (Blatt, 1990, 1998; Blatt & Blass, 1992, 1996; Blatt & Homann, 1992; Blatt & Maroudas, 1992; Hokanson & Butler, 1992; Nietzel & Harris, 1990; Ouimette & Klein, 1993; Robins, 1995).

Initially Blatt studied depressive experiences in non-clinical populations and only later studied them in psychiatric populations. An individual can experience typical experiences of depression without being clinically depressed. Besides, the two types of depressive experiences are not mutually exclusive. They can co-occur in one individual. Individuals with a dependent personality style or with a self-critical personality style have depressive experiences more frequently than individuals without those styles (Blatt et al., 1976).

Dr. Rui C. Campos, Departamento de Pedagogia e Educacao, Universidade de Evora, Apartado 94, 7002-554 Evora, Portugal. Tel. : + 351 266 744 522. Fax : + 351 266 744 521. E-mail : rcampos@uevora.pt. / ruiccampos@clix.pt

The two personality styles are different in motivation, relational and coping styles and in defensive mechanisms. Dependent individuals value are mostly concern with intimacy and harmony in their interpersonal relationships. They usually feel very gratified with the presence of others. They tend to be passive and inhibit aggressive expressions and all behaviours they feel that it can compromise or disturb relationships' harmony. In the absence of others they tend to feel week and helpless. They usually do not feel devaluated.

Self-critical individuals, on the other hand, usually have problems in their interpersonal relationships that are marked by conflict, critic, hostility and some distance. They tend to blame themselves and assume responsibility for their failures and to feel unworthy. They have strong needs and goals of success and personal achievement, so they can compensate unworthy feelings and a devaluated self-image. They usually pursue very high goals and ideals, what frequently leads them to failure and consequently to unworthy feelings and feelings of failure to live up to the expectations.

Dependent individuals use mostly avoiding defensive mechanisms as denial or repression and self-critical individuals use mostly counteractive mechanisms as intellectualization or reaction formation ( Blatt, 1990; Blatt & Blass, 1992; Blatt & Homann, 1992).

Blatt's perspective about personality dimensions goes beyond their relation with depression (Blatt & Maroudas, 1992). Initially Blatt (1974) distinguished an anaclitic depression from an introjective depression, but more recently, he generalised this distinction to define two primary configurations of psychopathology (Blatt & Shichman, 1983) - anaclitic configuration and introjective configuration. The conceptualization of an anaclitic personality and of an introjective personality has implications that go beyond the comprehension of depression, and can be applied to a wide range of psychopathologies.

The distinction between an anaclitic configuration and an introjective configuration is also extensive to normal development (Blatt & Blass, 1990, 1992, 1996). Despite normality being theoretically defined as an integration of relatedness and attachment developmental tasks with self-definition developmental tasks, within normality individuals, can emphasise one type of developmental tasks, neglecting the other one, defining two basic personality configurations.

Despite the importance of Blatt's conceptualization for psychoanalitic theory and of the Rorschach method in assessment and clinical psychology there are only a few number of studies that explore the manifestations of dependency and self-criticism as types of depression or depressive experiences and as personality types in Rorschach (Bornstein, Poynton & Masling, 1985). No study has used the Rorschach Comprehensive System as a scoring system.

Aiming to study the manifestations of dependent and self-critical personality styles in Rorschach, using the Rorschach Comprehensive System (Exner, 1986), we have selected a large number of variables (a total of 60[1]) for the present study, from the variables that can be obtained in that system, because of the exploratory nature of the study. The large number of variables result also from the fact that some of them were analysed not only in a continual (or frequency) dimension, but also dichotomized, since the interpretation of Rorschach using the Comprehensive System considers some variables by the meaning they have depending on some values.

**Method :**

**Participants :**

The initial participant sample (submitted to the selection procedure for the Rorschach administration) was composed by 359 female college students (mean age = 20.3 years). For the majority of the students race was caucasian.

**Materials :**

It was used the portuguese version (Campos, 2000) of Depressive Experiences Questionnaire (D.E.Q.) (Blatt et al., 1976), the portuguese version (Vaz Serra, 1972) of Beck Depression Inventory (B.D.I.) (Beck, Ward, Mendelson, Mock & Erbaugh, 1961), and the Rorschach method, using Rorschach Comprehensive System.

D.E.Q. was initially constructed to measure depressive experiences in non clinical populations (Blatt & Zuroff, 1992). It provides results for three scales or factors, that resulted from the principal component analysis conducted with the original standardisation sample of american college students (Blatt et al., 1976). Factor one was labelled dependency and factor two, self-criticism. In addition to these two principal factors, consistent with the two depressive dimensions previously presented by Blatt (1974), factorial analysis revealed one more factor, labelled efficacy. Individuals with high scores on this scale tend to present goal oriented strivings, but not an excessive competition with others.

The portuguese version of D.E.Q. presents appropriate pychometric properties (Campos, 2000). Results of internal consistency and of factorial structure were quite similar to those obtained by Blatt (Blatt et al., 1976, Zuroff. Quinlan & Blatt, 1990). Some other evidences of the questionnaire validity were also obtained (Campos, 2000). The portuguese version of B.D.I. seems also psychometrically appropriate.

**Design and procedure :**

The Portuguese version (Campos, 2000) of the Depressive Experiences Questionnaire

(D.E.Q.) (Blatt et al., 1976) and the portuguese version (Vaz Serra, 1972) of Beck Depression Inventory (B.D.I.) (Beck et al., 1961) were administered to the initial sample of female college students.

The selection of participants for the Rorschach administration was conducted by the extreme groups' methodology (Mongrain, Vettese, Shuster & Kendal, 1998), which made possible to form 3 groups: a group with a self-critical personality style (group 1), a group with a dependent personality style (group 2) and a non risk to depression or control group (group 3). To belong to group 1, participants had to obtain a result equal or above the first quartile of D.E.Q. self-criticism scale and a result under the first quartile of dependency scale. The opposite was necessary to belong to group 2. Finally to belong to group 3, participants had to obtain results under the first quartile of both scales of D.E.Q..

Our methodology was quite similar to the one used by several authors (Mongrain et al., 1998; Mongrain & Zuroff, 1994, 1995; Santor, Zuroff, Mongrain & Fielding, 1997; Zuroff, Igreja et al., 1990; Zuroff & Lorimier, 1989; Zuroff & Mongrain, 1987).

To belong to any of the three groups participants had also to obtain a result under the cut-off point in B.D.I.. We considered 12 as cut-off point, as in the portuguese adaptation (Vaz Serra & Abreu, 1973). We used a non-depressed sample because the use of clinical samples in the study of predisposition personalities can contaminate results, due to the influence of characteristics related with the depressive state. Investigation has demonstrated that some mood states, as depression, influence the assessment of several personality characteristics (Bartelstone & Trull, 1995; Ouimette & Klein, 1993, Robins, 1995).

From the initial 359 participants, 21 belonged to group 1, 20 to group 2 and 23 to group 3. Ten participants of group 2 and 3 and 11 of group 1 were randomly selected for Rorschach administration. Rorschach was administered by the author 12 weeks, in average, after the administration of D.E.Q. and B.D.I.. After the administration of Rorschach, in the same session, B.D.I. was also administered, to assure that at the moment of Rorschach administration, participants weren't clinically depressed. If that happened, they were excluded as it occurred in one case. To control for the influence of previous knowledge in the administration of Rorschach, it was assured that the author did not know the group to which participants belonged.

Protocols were coded by the author and an inter-rater reliability study was conducted. 33% of the protocols were coded by the author and by a colleague[2]. It was calculated the agreement percentages for the various response segments, which are presented in Table 1, following the methodology proposed by Exner. It can be concluded that all the agreement percentages fall into values recommended by Exner.

**Table 1**

**Inter-ratter agreement percentages for Rorschach response segments**

| Response segments | Agreement percentage |
|---|---|
| Location + | |
| Developmental quality | 93.2% |
| Determinants | 85.7% |
| Form quality | 86.8% |
| Pairs | 95.7% |
| Contends (principals) | 91.0% |
| Contends (secondary) | 93.1% |
| Popular | 97.8% |
| Organisational activity | 95.7% |
| Special scores Critical | 92.1% |
| Special scores Not critical | 97.7% |

**Analysis and Discussion of Results :**

Before conducting any statistical analysis, we considered the possibility of partialing for the total number of responses - variable R. This is important when there is a significant difference between groups in that variable. Cronbach suggests that if statistical tests show significant differences between groups in this variable, then it should be controlled for.

Since there was no significant differences between groups for means ($F(2,30)=.07$, $p=.93$) and for medians (median test $c(2,30)^2=0.27$, $p=.87$), we didn't consider important partialing for the total number of responses.

The number of participants and the option for a methodology of discriminant analysis forced a selection of variables (from the initial 60) to submit to the analysis. To select the most relevant variables, we calculated the correlations of each initial 60 Rorschach variables with dichotomic variables, self-critical style and dependent style.

Discriminant analysis is an exploratory multivariated method to study differences between groups (Betz, 1987). It allows to identify the combination of Rorschach variables that best differentiate the studied groups, and not only analyse the relationship of each variable alone, with each of the styles, as for example in correlation analysis Unlike univariated methods which consider differentiation power of each variable alone, this method permits to consider variables together, going beyond the limitations presented for example by Weiner (1997), which says the Rorschach variables, considered separately, explain poorly personality functioning.

It was conducted a forward analysis, entering a pool of 25 variables. We obtained two discriminant functions after 19 steps.

The first discriminant function is significant (Wilks Lambda of 0.0097; $c^2(38,30)=83.46$, p=.00003*)*. Group means in the first discriminant function are for group 1, -4.02, 5.07 for group 2, and -1.05 for group 3.

The second discriminant function is also significant, (Wilks Lambda of 0.1642; $c^2(18,30)=32.52$, p=.01910*)*. Group means in the second discriminant function are 1.99 for group 1, 1.97 for group 2 and -2.97 for group 3.

**Table 2**

**Results of Comparisons between Groups in Discriminant Analysis**

| | **Group 1** | **Group 2** |
|---|---|---|
| Group 2 | F= 7.35 | |
| | p=.002 | |
| Group 3 | F=2.94 | |
| | p=.050 | F=4.65 |
| | | p=.011 |

From the analysis of group mean values in both discriminant functions and from the analysis of comparisons between groups, presented in Table 2, we can see that the first discriminant function discriminates group 1 from group 2 (the two risk groups) and the second discriminates group 1 and 2 from group 3 (non risk group). The two discriminant functions correctly classify 100% of cases, which is an excellent effectiveness index.

In Table 3 are presented correlation values of Rorschach variables with both obtained discriminant functions. Through the observation of correlation values of those variables with discriminant function 1, we can say that a group of four variables appear to be the best to differentiate the two styles in Rorschach, they are: W:M (operationalized as W-M), MOR., H:(H)+Hd+(Hd) (operationalized as H-[(H)+Hd+(Hd)]) and X-%.

From the observation of results of variables MOR and W:M, we can say that individuals with a self-critical style present a more devaluated self-image and have more needs and goals of success and achievement than dependent individuals. The literature refers (Mongrain & Zuroff, 1995) that in non clinical populations individuals with self-critical traits tend to feel very undervalued and to show a great preoccupation with their self-value and with what they are able to accomplish. They tend to pursue very high standards and goals, so they can compensate their depreciated self-image. The dependent individuals, on the other hand, are more preoccupied with interpersonal relationships and not with their self-value. Their needs and goals are mostly of intimacy. They do not usually feel unworthy but mostly helpless (Blatt & Zuroff, 1992).

**Table 3**

**Correlation Values of Rorschach Variables with Both Discriminant Functions**

| Variable | Discriminant Function 1 | Discriminant Function 2 |
|---|---|---|
| X-% | -.13 | .16 |
| Afr | -.09 | .15 |
| W:M | -.10 | -.01 |
| WsumC | -.04 | .14 |
| Imagin Resp* | -.08 | .15 |
| FM | -.01 | .08 |
| Ego>0.44 and r=0 | .04 | .11 |
| SumV+FD>2 | -.03 | .10 |
| SumV>0 | -.03 | .10 |
| SumC'>2 | .01 | .10 |
| CF+C:FC | .08 | -.09 |
| SumSH:SumC | .02 | -.12 |
| p>a+1 | .03 | .10 |
| BadHR | -.08 | .07 |
| FD | -.02 | .11 |
| H:(H)+Hd+(Hd) | .11 | -.11 |
| Col-ShBlends>0 | -.03 | .15 |
| MOR | -.14 | .05 |
| X+% | .07 | -.12 |

*Responses with an imaginary content

On the other hand, the result of variable H:(H)+Hd+(Hd) suggests the greater difficulties of self-critical individuals in interpersonal relationships are due probably to a distortion or incomprehension of the human element. As it is described in the literature (Blatt & Zuroff, 1992, for a revision) self-critical individuals often have aggressive and conflictual relationships. Introjective individuals emphasised, in their development, self-definition tasks defensively neglecting attachment and relatedness tasks. They seem not to know how the others are and how the relationships work. Anaclitic people, on the other hand, are described in the literature as strongly investing in the establishment and maintenance of relationships, having more abilities, harmony and feeling more satisfied in those relationships than introjective individuals. In their development they emphasised relatedness tasks, neglecting self-definition tasks (Blatt, 1990).

As far as variable X-% concerns, we analysed protocols of the self-critical group to explore some other aspects of those protocols which could be associated to this variable. We saw that the majority of *minus* responses was in chromatic cards (II, III, VIII, IX, X). On the other hand the number of responses coded with another formal quality (+, o, u) wasn't significantly different in chromatic and non chromatic cards ($c^2$=21.08, p<.001). The presence of colour is a disturbing factor. This result suggests difficulties of self-critical individuals to deal with emotions, which seem to disturb and compromise their perceptive accuracy and cognitive function. It seems that self-critical individuals have more difficulties to deal with emotions than dependent individuals and their cognitive function seems more dominate or negatively influenced by emotions. In emotionally charged situations, they would tend to be negatively influenced and would have a more distorted perception of reality.

The discriminant analysis just examined permitted to identify the combination of Rorschach variables that best differentiate self-critical and dependent styles. However we weren't able to identify which variables reflect the way each style expresses itself in Rorschach. So we decided to conduct two more discriminant analysis.

In the first one we compared the self-critical group with the control group and in the second one we compared the dependent group with the control group. We selected for analysis 1 variables (from the initial 60) with the highest correlation values with self-critical style[3] and for analysis 2, variables with the highest correlation values with dependent style[4].

The discriminant function of each analysis was obtained after four steps. The discriminant function of analysis 1 is significant (Wilks Lambda of 0.2297; $c^2$(4,20)=19.28, p=.0007*)*. Group means in the discriminant function of analysis 1 are: -1.45 for group 1, and 1.45 for group 3.

The discriminant function of analysis 2 is also significant (Wilks Lambda of 0.5198; $c^2$ (4,20)=10.47, p=.0330*)*. Group means in the discriminant function of analysis 2 are: -0.91 for group 2 and 0.91 for group 3.

The discriminant function of analysis 1 correctly classifies 95% of cases, which can be considered an excellent effectiveness index. The discriminant function of analysis 2 correctly classifies 80% of cases. This index, though lower, is nevertheless satisfactory.

Correlation values of Rorschach variables with discriminant function of analysis 1 and with discriminant function of analysis 2, presented in Table 4, allow us to identify which variables reflect the way each style expresses itself in Rorschach.

The result of variable X-% would indicate, following what we have already said, that self-critical individuals have great difficulties to deal with emotions, which influence and disturb their cognitive functioning. In emotionally charged situations they would tend to be negatively influenced and would have a distorted perception of reality. On the other

hand, the result of variable Afr suggests that these individuals are strongly attracted by affective stimulation. They work bad with emotion, but they can not resist to it. This situation may lead tointerpersonal problems.

**Table 4**

**Correlation Values of Rorschach Variables with Discriminant Function of Analysis 1 and Analysis 2**

| Variable | Discriminant functio analysis 1 | Variable | Discriminant o function analysis 2 |
|---|---|---|---|
| X-% | -.41 | MOR | .42 |
| Afr | -.33 | Fd>0 | -.37 |
| S>2 | -.21 | SumC'>2 | -.27 |
| SumSH:SumC | .21 | SumSH:SumC | .26 |

The result of variable S>2 probably reflects the tendency of self-critical individuals to strongly look for individuality and independence. Self-definition and individuality are, (Blatt & Blass, 1992), goals always pursued but never attained by individuals of the introjective type. The result of this variable can also show an opposition and aggressive attitude. This attitude can result in difficulties in relationships, wich will consequently reinforce the defensive, reserved and cold behaviour of these individuals with others.

As regards the dependent style, the result of variable SumC'>2 possibly reflects the tendency of these individuals to express their preoccupations and emotions in mask form, through physical complaints and somatic concerns, as it is reported by Blatt and Homann (1992). It reveals an affective constriction activity, an avoidance of emotional expression. According to the literature (Mongrain & Zuroff, 1994), the expression of emotions is problematic for these individuals, since it is felt as a possible disturbing factor for their interpersonal relationships.

In contrast, the result of variable Fd>0 reveals the passive-receptive needs and wishes and the oral component of dependent individuals. The result is supported by the study of Bornstein, et al. (1985).

As far as variable MOR is concerned, its result would indicate that dependent individuals have a self-image that is not devaluated, supporting Blatt's statement already mentioned that, although they can feel week and helpless, they do not usually feel unworthy. Maybe they are not aware of their unworthy feelings, through defensive mechanisms of denial or repression.

Finally the meaning of the result of variable SumSH:SumC (operationalized as SumSH -SumC) should be that individuals with a self-critical style or with a dependent style have in the present moment enough internal affective resources to deal with painful affective stimulation which operates inside them. This is not surprising, since the studied individuals were not clinically depressed, so they were not experiencing an overload of internal stimulation. We think, however, that in a depressive state this stimulation can exceed resources to deal with it.

The results suggest that risk individuals are even experiencing, in the present moment, a smaller level of painful affective stimulation than non risk individuals (from the control group). The condition of having a predisposition style and not being depressed can be associated to a defensive avoidance of internal painful stimulation. It could be that when depression occurs these painful experiences would be felt with much more intensity.

**Limitations of the study :**

It is important to say that the obtained results must be considered carefully, since discriminant analysis is a maximization procedure which capitalizes on sample-specific co-variation (Betz, 1987). This is only an initial exploratory work. The consistency of results should be assessed in future studies, that should try to replicate the obtained results with other samples.

Another limitation is the fact that we have used a small female sample only, and gender is an important variable affecting the manifestations of dependent and self-critical personality styles

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**Footnotes :**

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[1] W>D+Dd; W:M; DEPI=5; Dd>3; S; S>2; M; SumSH:SumC; Mp>Ma; FM; WsumC; WsumC<2.5; Sum C'; Sum C'>2; Sum T; Sum V; Sum V>0; FD; FD>2; SumV+FD>2; Ego; Ego>0.44 and r=0; Ego<0.33; C>0; CF+C; CF+C>0; CF+C:FC; CF+C>FC; SumC':WsumC; SumC'>WsumC; Intelect; Intelect>3; Col-ShBlends; Col-ShBlends>0; Blends<4; CDI +; Afr; Afr<0.46; p>(a+1); P>7; X+%; X-%; Xu%; Isol/R; Isol/R>0.24; H; H<2; H:[(H)+Hd+(Hd)]; (H)+Hd+(Hd)>H; BadHR; BadHR:GoodHR+1; BadHR>Good; ImaginResp (Responses with an imaginary content); AG; MOR; COP; COP<2; PER; Zf>12; Fd>0;

[2] I would like to thank Prof. Rosa Novo for her collobration.

[3] 18 variables [4] seven variables

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# Treating Panic Attack with Hypnosis in Combination with Rational Emotive Therapy-A Case Report

**Amool R. Singh and K.R. Banerjee**

A single subject research design was employed in treatment of panic attack. Hypnotherapy and Rational Emotive therapeutic approach were applied in combination. Treatment lasted for 16 sessions and result showed increased sense of control, improved self-confidence, elimination of psychopathological symptoms with no recurrence of subsequent panic attack.

Hypnosis is basically an altered state of consciousness, which can be used with certain individuals to develop desirable changes in behavioral (habit) pattern, motivation, self-image and life style at large. The therapist during hypnotherapy primarily works with clients' unconscious processes in order to influence them in the desired direction of health and welfare (Der Du Fay and Lewington, 1990). In recent years, mental health professionals have been more aware of the problems associated with panic disorders. Panic may occur as part of several conditions. However, panic disorder is characterized by unpredictable attacks of severe anxiety with pronounced autonomic symptoms not related to any particular situation. These unpredictable attacks are usually associated with feeling of dread and doom. Further, dizziness, choking sensation, shortness of breath and rapid heart rate may lead the victim to believe he or she is suffering a heart attack or losing control. Increased frequency of attacks often leads to phobic avoidance resulting in restriction or even elimination of normal social activities.

Treatments for anxiety states range from pharmacotherapy to cognitive and behavioral strategies and hypnotherapy (Ballonger, 1984; Beck and Emery; 1985; Clarke and Jackson, 1983, Pathak,1999 and Biswas and Chattopadhyay, 2000).

Clinicians with different theoretical preferences have applied hypnotherapy to the treatment of anxiety states, panic attacks and phobias (Clarke and Jackson, 1983; Erickson and Rossi, 1979; Tosi et al 1982; Der Fay and Lewington, 1990). Some therapeutic interventions apply relaxation exercises and guided imagery in the conjunction with psychotherapy for their anxious and worried clients. Kroger (1977) used hypnotherapy to help re-evaluate the client's needs underlying symptoms such as phobias, depression and hypochondriasis, which originate with anxiety. Miller (1986) claimed success utilizing brief, re-constructive hypnotherapy for anxiety states and Meer (1985) emphasized the importance of self-hypnosis so that fears may be experienced and controlled rather than avoided.

It is established that hypnosis, may be used in conjunction with Rational Emotive Therapy (RET), which identifies cognitive distortions and irrational thinking as the source of the

Amool R. Singh, Ph.D., Associate Professor and Head Dept. of Clinical Psychology, Ranchi Institute of Neuro-Psychiatry and Allied Sciences, Kanke, Ranchi- 834006 and K. R. Banerjee, Maj. Gen. (Retd.) Director RINPAS (Retd.), Consultant Neuro-Psychiatrist, Samvendna Clinic S-325 Greater Kailash II, New Delhi.

presenting disorder. Tosi and Baisden (1984) employed a hypnotic-imagery modality to amplify the cognitive structuring process.

The index case report is based on the application of hypnotherapy in collaboration with A-B-C-D-E paradigm of RET. Hereafter; this approach will be referred as Rational Emotive Hypnotic Therapy (REHT).

**Method :**

**Case:**

A married man in his early forties, with three children aged 19, 16 and 12, commerce graduate with urban background and owner of a steel industry.

He complained feeling of tiredness and body ache, feeling of apprehension and “panic attacks”. Over a period of ten months he had experienced several episodes of panic attacks. The patient came to clinic due to increased frequency of such attacks which were accompanied by acute fear of dying, increased palpitations, chest discomfort, choking sensation, trembling of limbs, sweating and parenthesis. The attacks took place in factory, on his way to home in car and in home especially before leaving for office.

In the clinic, the physician examined the patient and no physical ailment was identified for possible cause of these attacks.

The patient as well as his spouse described, “prior to the onset of attacks he was healthy, confident, energetic, responsible, independent and active".

**Procedure:**

The subject attended sessions twice a week initially. Last four sessions were attended on weekly basis. The duration of session was about one hour. The patient’s base line assessment was completed in first two sessions. Subsequently the patient was introduced to hypnosis by using :

(a) Relaxation (mainly focusing on breath regulation and muscle tension)

(b) Visualization of pleasant scene (in which the client envisions himself in a safe, secured, pleasant and comfortable place)

(c) The red balloon (Walch, 1976) (the client is directed to identify and write any problem (i.e. feeling of guilt, frustration or aggression) he wishes to get rid off on a piece of paper, deposit them in a basket attached to a large red helium balloon, and let it drift away into the sky).

The client was also made acquainted with elaborate explanation of the A-B-C-D-E theoretical framework of RET (Ellis,1962) and its application to therapy (A) situation (B) cognition (C) emotional response (D) physiological response and (E) behavioral response.

The client during trance was asked to visualize a television screen. When he was comfortable he could turn it on and envision the past incident (during attack), any part of event of his choice in which he experienced negative thoughts. By watching the screen, rather than reliving an unpleasant experience he was able to watch himself in a much safer, more detached, and less emotionally involved way. The A-B-C-D-E components were identified and provided him ample opportunity to tap some of his irrational thoughts and especially self-defeating tendencies. Having done so, he would return to his pleasant scene. Again, once he gained feelings of comfort and confidence, he was advised to visualize the same incident, this time substituting more rational and logical thoughts and eliminating self-defeating attitude.

All through the sessions, the patient was again and again asked about the scene of events and his rational coping pattern (his rational explanation of modified behavior with appropriate implementation of rational self-management skills). At times, the patient was guided by way of additional ideas and thoughts which would lead to different behavioral, physiological and emotional responses, but for the most part, the patient guided the cognitive restructuring and behavioral rehearsal himself. Every therapeutic session was followed by discussion with client.

**Results:**

There was only one panic attack after six sessions but subsequently the panic attacks ceased completely and therapeutic session was discontinued after 16 sessions. Treatment showed an increased sense of control, improved self-confidence and elimination of pathological psycho-physiological symptoms. The patient did not report recurrence of the attacks even after 3 years. However initially for a few months, even after therapeutic sessions, some isolated symptoms persisted though gradually improved through reassurance on phone.

**Discussion:**

The rational, self-directed hypnotherapeutic intervention in panic attack was reported to be successful earlier by Der Fay and Lewington (1990). The index study was done on the guidelines of above report only.

The author (ARS) has been practicing hypnotherapy with the clients having wide range of problems i.e. substance and alcohol abuse, nicotine dependence, psychogenic impotence, tension headache and children with enuresis. The efficacy of hypnosis has been beyond question. Suggestion during trance was major way of helping the client. However, the relapse, though infrequent, was one of the main cause of concern and then associating hypnosis with RET theoretical framework was thought about and applied in the present study.

Personally, I am of view that this approach may not be appropriate with the client with less education, low motivation, or diminished cognitive abilities. For such type of clients hierarchical steps in formulation of therapeutic structure may be required before the

application of Rational Emotive Hypnotic Therapy (REHT) used in the index case report.

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# Rorschach Profile and its Relationship with PEN Questionnaire in Borderline Psychosis

**Adarsh Kohli and Rajinder P. Kaur**

Rorschach and PEN were administered to 125 patients attending the Psychiatry Department of the Post Graduate Institute of Medical Education and Research, Chandigarh (India). Cases were referred to Psychology Unit for ruling out psychotic illness. The questionnaire variables did not show significant correlation with Rorschach. The Rorschach profile shows signs of general disturbance and propensity to psychosis rather than clear-cut pathognomic signs.

The Rorschach test is the oldest and the most widely used psycho -diagnostic tools for adults in the clinical setting till today (Dubey, 1981). Surveys indicate that diagnostic testing remains the most frequently demanded function of clinical psychologists in psychiatric units of hospitals. Verma (1980) reported that 50% of inpatient referrals and 20% of the outpatient referrals were for differential diagnosis.

In fact most of the tests meant for clinical purpose show their utility in differentiating the cases into groups. (Arora, 1972 and Pershad, 1980). The Rorschach profile for ruling out psychiatric illness mainly psychosis is characterized by certain undebated features. The ability of these psychological tests to pick certain soft signs is an issue that needs to be addressed to.

The low reliability seems to be because of difficult to diagnose cases, which constituted 5 to 10 percent of the total attendance to our psychiatric clinics. Dwivedi et al (1995) found that schizophrenics gave less number of responses and more anatomy and sex content. One methodological problem in finding out the usefulness of psychological tests for diagnosis that has been and still remains is the low reliability of the psychiatric diagnosis itself. (Ley, 1971). In a study on 25 active schizophrenics and 25 recovered cases, Sandhu (1978) observed that the recovered schizophrenics showed improvement in the form level, reality orientation, emotional control and decline in anatomy content. It has been claimed that some of the pathognomic signs of schizophrenia such as confabulation, position and contamination which are indicative of thinking disturbances, loosening of association and of ego boundaries are indicative of presence/absence of psychosis or no psychosis especially schizophrenia.

In another study (Pershad, Verma and Dubey, 1979) it was found that 26.5% of the difficult to diagnose cases gave at least one of the pathognomic signs. When taken separately 20% of the protocols were found to have one or more examples of confabulation, 11 % of contamination and 6% of position responses. These signs are suggestive of loosening of association, tendency to over-generalize, lack of reality contact and pursuit of one's or personal meaning to common symbols (Brar,1970).

Adarsh Kohli, Ph.D., Associate Professor and Rajinder Pal Kaur, Ph.D., Clinical Psychologist, Department of Psychiatry, PGIMER, Chandigarh-160012 (India). E-mail: medinst@pgi.chd.nic.in

The real utility of any psycho diagnostic test and its indices is determined to a large extend by the success with which it could differentiate the difficult to diagnose cases. At this point, it is clear from the results that all the schizophrenics do not show the so-called pathognomic signs like confabulation, contamination, and position responses. In fact about 30-35 percent of the schizophrenic patients with confirmed diagnosis and difficult to diagnose cases give these responses and absence of these pathognomic signs, however, should not be taken as a proof of absence of schizophrenic illness.

There are patients who are struggling to maintain a contact with reality. Some were in the early stages of schizophrenic breakdown. Some were endeavoring to emerge out of their morass. The theory can be designed to arrest the trend towards a break, or towards giving the patient the necessary support in his striving to reintegrate himself.

**Objectives :**

The present study was conducted with the following objectives:

- To analyse the pathognomic signs on Rorschach in borderline patient, especially in ruling out psychosis.
- To study the relationship between dimensions of PEN Inventory and
- To study the important indices of Rorschach

**Material and Method :**

**Sample :**

The sample consisted of 125 patients attending the OPD of the Department of Psychiatry, Post Graduate Medical Institute, Chandigarh for a period of one year. They had 12 years of schooling with mean age 29.9 years (SD 10.02). The cases were difficult to diagnose and the diagnosis was deferred at the time of work-up. Later, they were referred to psychology section for psychological testing to rule out psychiatric illness specifically psychosis. Duration of illness varied from 3 months to 6 months. Patients who were not co-operative for the study were excluded.

**Too**ls :

1) The Rorschach Test was administered and scored by Beck's method (Beck et al, 1961)
2) PEN Inventory Hindi Translation (Menon and Verma, 1988)

**Results and Discussion :**

The scores on PEN Inventory indicate slightly increased scores on psychoticism, low scores on extraversion with high scores on neuroticism and lie. General disturbance in these patients was slightly high but the scores were within the deviation of one standard. When the PEN variables were correlated with Rorschach variables no significant correlations emerged. Probably the scales of PEN and the factors of Rorschach are measuring different variables.

**Table 1**

**Scores on PEN in Borderline Cases**

| | |
|---|---|
| Psychoticism | Mean - 8.02 |
| | S.D. - 3.45 |
| Extraversion | Mean - 8.88 |
| | S.D. - 4.00 |
| Neuroticism | Mean -11.43 |
| | S.D. -4.52 |
| Lie | Mean -8.37 |
| | S.D. -2.99 |

**Table 2**

**Mean, S.D. & Percentages of Rorschach Variables**

| | M | SD |
|---|---|---|
| Total Responses | 11.43 | 4.58 |
| Populars | 4.08 | 1.93 |
| Whole Responses | 3.66 | 2.44 |
| Major Detail | 8.32 | 4.22 |
| Form Plus level | 7.35 | 3.52 |
| F & F minus | 3.99 | 3.53 |
| Human Responses (H + Hd) | 1.38 | 1.69 |

**Table 3**

**Correlations between PEN Scales and Rorschach Variables**

| | P | E | N | L |
|---|---|---|---|---|
| W | -.10 | .16 | -.12 | -.09 |
| D | -.08 | -.06 | .12 | .02 |
| F+ | .16 | .18 | .08 | .01 |
| Pop | -.03 | .13 | -.05 | .01 |
| TR | -.02 | .02 | .06 | -.25 |
| F & F - | .18 | .08 | .02 | .06 |

As regards the Rorschach variables, the protocol was constricted in productivity. The total responses were few and the quality of responses was poor. The popular were generally maintained (i.e. 25%) which is an indication that the patients were not having clear signs of psychosis. They were marginally maintaining group conformity, though with difficulty.

**Table 4**

**Pathognomic Signs**

| | | |
|---|---|---|
| Suspiciousness | 18 | Percent |
| Poor Group Conformity Low Populars | 23 | Percent |
| Low Ego Strength | 18 | Percent |
| No Human Responses | 20 | Percent |
| Poor Form - Poor Elaboration | 8 | Percent |
| Stereotypy: | 4 | Percent |
| Position Responses | 2 | Percent |
| Contamination | 1 | Percent |
| Confabulation | 0.5 | Percent |
| Perseveration | 18 | Percent |
| Position Responses | 1 | Percent |
| Bizarre/Odd Responses | 0.5 | Percent |

Poor capacity for logical thinking, poor reality testing was also evident from these protocols. The difficulty in interpersonal relations was evident by low human responses. The initial and almost foremost signs in case of psychotic illness is the disturbance of human relationships within one's social milieu.

Further analysis of the Rorschach protocol suggests, Poor Group Conformity ( in 23%), Low Ego strength (in 18%), Low Human content (20%), Poor Form and inability to elaborate on a percept (80%), Stereotypy (4%), Position response (2%), Suspiciousness (18%), and Abstraction (0.2%).In addition to these signs the prodrome of Psychotic illness is characterised by Conflict with authority - 4%,.Slow in responding - 4%, Fearful/ Guilty- 2%, Indecisiveness - 2%, Pre-occupation with sex-2% Inner tension-1%, Need for love -1%,Prototype Responses -1% Abstraction-0.2% and Card – Turning 0.2% The hardcore pathognomic signs of psychotic illness were present in low percentages. The appearance of these signs is related to the severity and psychopathology of psychotic states. If the psychiatrist is in a dilemma, so is the psychologist since the obvious signs are lacking and core features of psychosis are missing.

**Conclusions :**

The patient who comes to the clinic with the problem of possible psychosis shows clear cut signs of general disturbance, and also vulnerability to psychosis under stressful conditions but not the pathognomic signs as are evident of psychotic illness on Rorschach. On questionnaire tests, the PEN Scale already claims to be measuring propensity to or tendency to develop psychotic symptoms under stress . Of these patients 45% continued to be borderline on subsequent follow–up and 25% became clear psychotics with only 30% still posing a problem for diagnosis.

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# How Common is Anxiety in Surgical Cases ?

**Lt. Col. D. Saldanha**

Ninty two hospitalised patients in the age range of 20-46 yrs with a Mean of 29.89 yrs and SD 5.37 were evaluated on Taylor's Manifest Anxiety Scale (Taylor, 1953) before and after surgical procedures. 51.08% had definite evidence of anxiety on TMAS correlated with somatic symptoms before operative procedure. 23.91% showed persistence of anxiety. Operative procedure had decreased their anxiety levels by 53.19%. 6.52% of cases who remained unchanged required psychiatric management to ameliorate their anxiety symptoms through psychotherapy and psychoactive drugs. It is evident from this study that surgical procedures raise the anxiety levels in patients. Successful surgical procedures do reduce the level of anxiety to a considerable extent.

Anxiety is an emotion or in psychiatric language an effect. The sensation of anxiety is commonly experienced virtually by all humans. The feeling is characterised by a diffuse unpleasant, vague sense of apprehension often accompanied by autonomic symptoms (Tyler, 1982) i.e. Palpitation, difficulty in breathing, dry mouth, nausea, frequency of micturition, dizziness, muscular tension, sweating, abdominal churning, tremor, cold skin etc. An anxious person may feel restless, as indicated by an inability to sit or stand still for long. The particular constellation of symptoms present during anxiety tends to vary among people. ( feeling of dread & threat, irritability, panic, anxious anticipation, worrying over trivia, difficulty in concentration, initial insomnia, inability to relax etc ). Anxiety states are common disorders. Lader and Marks (1982 ) summarised data from 22 studies giving figures ranging between 2 to 5 percent of patient's prevalence in the total population and between 6-27 percent of patients in psychiatric practice. A most recent study shows one-month prevalence as 7.3%. (David, 1992). Though these figures indicate that anxiety states are remarkably common but it is important to stress that in most cases they are comparatively mild. Persons who are already exposed to insurgency operations are expected to manifest anxiety symptoms more when they are subjected to surgery. It is recognized that surgical procedures do induce anxiety and can have adverse effects on the course and outcome of surgery ( Markland, 1993 ). No study has till date shown the incidence of anxiety in surgical cases operating in the insurgency areas in our country. It is in this context that a study was undertaken to find the incidence of anxiety in surgical cases who are already exposed to stressful environment and to suggest remedial measures to reduce the adverse effect on the course and out come of surgery and also to reduce unnecessary premedication using Benzodiazepine group of drugs.

**Material and Method** :

All surgical cases admitted for elective surgery between Oct 93 to Oct 94 in a zonal peripheral hospital actively involved in treating casualties from insurgency operations

Lt. Col. D. Saldanha, Addl. Adviser (Psy) Military Hospital, Meerut.
(The study was carried out at 92 Base Hospital while posted at Srinagar)

were carefully screened before taking them in the study. The inclusion criteria followed were:

(a) Age group between 20 to 45 yrs. (b) Should not have undergone any surgical procedure or exposed to general or spinal anesthesia. (c) Should not have taken psychiatric treatment. (d) Not dependent on alcohol or any chemical intoxicant. (e) Free from physical illness other than surgical disability. Only those cases for general anesthesia were included in the study.

Taylor's Manifest Anxiety Scale, an objective type of scale consisting of 50 questions with responses yes or no were given to all the subjects taken in the study 3 days before and 3 days after the surgical procedure. The questions are easy and simple to follow. They are 50 in all. Maximum score i.e. 50. Those who score 20 and less are considered in the normal range. Between 20 to 25 as borderline, 26 to 30 as mild anxiety, 31 to 35 as moderate type and above 36 as severe type. Those patients who develop complications after surgery were excluded from the study, premedication on the night of surgery was avoided in all cases. Each individual was given atropine 0.6 mg intramuscular and injection Pethidine 50 mg 30 to 45 min before surgery. The patients were assigned to four randomised groups. The groups delineated were :

A; Hamorrhoids, Fissures, and Fistula.

B; Hernias and Hydrocele.

C; Orthopedic cases and gun shot injuries in priority list 2.

D; Miscellaneous cases: e.g. Gall bladder Stones Renal & Vesicle Stones, Appendicitis, Thyroid cases.

Those who showed moderate anxiety after successful surgery were given anxiolytic drugs in therapeutic doses and active insight oriented psychotherapy. Results thus obtained were tabulated and statistically analysed.

**Results and Discussion :**

A total 92 patients who were taken in the study were randomised into four groups. Tables 1 and 2 show significance at .05 and .02 level in the anorectal, hernias and hydrocele surgeries. Importance of anxiety levels in the ortho cases, gun shot wound injuries and miscellaneous surgeries ( Appendicectomies, gall stone, renal stones etc ) reflected in table 3 and 4 are not statistically significant in isolation. However the significance of the study can be seen in table 5 where the reduction of post operative anxiety is significant at .01 level. ( pre-operative anxiety 51.08 % vs 23.92% post-operative anxiety). Successful operative procedure had decreased their anxiety level by 53.19 % table 5.Table 6 shows the pattern of switch from the pre-operative anxiety levels to post-operative anxiety levels.

**Table 1**

**Group-A-(Anorectal Surgeries)**

| | **Pre-operative N=26** | **Post-operative N=26** |
|---|---|---|
| Anxiety Range | | |
| Normal (N) | 12(46.15%) | 19 (73%) |
| Borderline Anxiety (B) | 10 (38.46%) | 5 (19.23%) |
| Mild anxiety | 3 (11.54%) | 2 (7.69%) |
| Moderate anxiety | 1 (3.85%) | 0 |
| Severe (S) | 0 | 0 |
| **Total** | **26** | **26** |

| | | | |
|---|---|---|---|
| Age range- | 23-40yrs | M=30.53 | SD+/ —5.3 |
| Preop anxiety range score | | 12-29 | |
| Post-op-anxiety | | 03-27 | |
| df=1 | $X^2$=3.91 | P< 0.05 | |

**Table 2**

**Group-B (Hernias & Hydrocoels)**

| **Type** | **Pre-operative Anxiety N=25** | **Post-operative Anxiety N=25** |
|---|---|---|
| Normal | 12 (48%) | 20 (80%) |
| Borderline anxiety | 10 (40%) | 3 (12%) |
| Mild anxiety | 01 (4%) | 2 (8%) |
| Moderate anxiety | 2 (8%) | 0 |
| **Total** | **25** | **25** |

| | | |
|---|---|---|
| Age range 25-46 M=31.4 | | SD+/—4.94 |
| df=1 | $X^2$=5.55 | P<0.02 |
| Pre-operative anxiety range score | | 6-32 |
| Post-operative anxiety | | 6-28 |

**Table 3**

**Group-C (Orthopedic Cases & GSW)**

| Type | Pre-operative Anxiety N=25 | Post-operative Anxiety N=25 |
|---|---|---|
| Normal | 15 (60%) | 20 (80%) |
| Borderline | 8 (32%) | 5 (20%) |
| Mild | 2 (8%) | 0 |
| Moderate | 0 | 0 |
| **Total** | **25** | **25** |

Age Range 20-43 M=28.96 SD+/-6.42
df=1 $X^2$ = 2.380 P>0.05 Not significant
Range Pre-operative Anxiety Score 14-27
Range Post-operative Anxiety Score 11-24

**Table 4**

**Group-D (Miscellaneous-Renal Stones, Gall Bladder Stones etc.)**

| Type | Post-operative Anxiety N=16 | Pre-operative Anxiety N=16 |
|---|---|---|
| Normal | 6 (37.5%) | 11 (68.75%) |
| Borderline | 5 (31.25%) | 3 (18.75%) |
| Mild | 3 (18.75%) | 2 (12.50%) |
| Moderate | 2 (12.5%) | 0 |
| **Total** | **16** | **16** |

Age range 22-36 M=27.93 SD+/-4.04
df=1 $X^2$ =31.60 P>0.01 NS
Pre-operative Anxiety Score range 9-35
Post-operative Anxiety Score range 7-28

**Table 5**

**Summary**

| Type anxiety | Pre-operative anxiety | Post-operative |
|---|---|---|
| Normal | 45 (48.92%) | 70(76.08%) |
| Borderline | 33 (35.87%) | 16 (17.39%) |
| Mild Anxiety | 9 (9.78%) | 6 (6.52%) |
| Moderate Anxiety | 5 (5.43%) | |
| **Total** | **92** | **92** |

Age range 20-46 M=29.89 SD+/- 5.37

Df=2 $X^2 = 14.5$ P<0.001

**Table 6**

**Summary**

| Percentage | Type | Change/No change |
|---|---|---|
| 95.56% | Normal | Remained unchanged |
| 4.44% | Normal | Switched to Borderline anxiety post-operatively changed to normal |
| 75.76% | Borderline | Change to normal |
| 24.24% | Borderline | No change |
| 88.89% | Mild | Returned to borderline |
| 11.11% | Mild | No change |
| 20% | Moderate | Returned to normal |
| 60% | Moderate | Returned to borderline |
| 20% | Moderate | Returned to mild |

**Observations :**

It is evident from the summary that 51.08% who had shown anxiety state before operative procedure, only 23.92% showed persistence of anxiety. Successful operative procedure had decreased their anxiety by 53.19%. In 6.52% of cases the anxiety symptoms remained unchanged.

**Discussion :**

Common observation shows that stress in whatever guise it may come, generates some form of emotional response. The stress may be ongoing or remote. It may take the form

of a single event, e.g. bereavement or a combination of events ; there may be no specific stress but some form of chronic anxiety may persist. (e.g. exposed to insurgence operations). The stress may be a recent event like the impending operative procedure, fully recognised by the individual or it may be remote and expressed from conscious recollection.

Anxiety symptoms have been documented in patients undergoing dental extractions and these have been correlated to post-operative pain (Liu, 1994 ). Although most of our patients who underwent extensive laparotomy due to gun shot injuries, none seems to correlate anxiety symptoms with post-operative pain, suggesting thereby that those patients whose anxiety levels remained unchanged may have been due to trait anxiety. Ricci et al (1995) showed hormonal changes in operative induced stress in 24 patients subjected to abdominal surgery. They advocated that the best method to reduce anxiety levels is to prevent pain post-operatively. Several studies have used medazolam (a benzodiazepine) for anxiolytic effects prior to surgical procedures (Jones, 1994; Tago, 1994). The main action of benzodiazepines ie hypnotic, anxiolytic, anticonvulsant, myorelaxant and amnesic, confer a therapeutic value in a wide range of conditions and they do reduce anxiety. In premedication diazepam is the drug of choice given in a single dose (Ashton, 1994 ). Its half life is over 100 hours, hence use of diazepam even in small doses may interfere in the measurement of anxiety post-operatively. For this reason subjects were not given benzodiazepine drugs prior to surgery. High levels of state anxiety after surgery correlated with post-operative pain has been found in a study conducted by (Liu et al, 1994) in 30 healthy patients who underwent day care dental extractions under general anesthesia. None of our patients showed moderate to severe anxiety post-operatively. Jacobson et al (1995) reported that the oral premedication an hour before minor surgery does not give any effect on anxiety regardless of the type of active drug or placebo administered. In the double blind study Jacobson et al ( 1995 ) found 78% of the patients experienced no change or decrease in the anxiety symptoms. Hence he advocated routine use of small doses of oral premedication one hour before elective surgery among low anxiety patients to be omitted.

Taylor's Manifest Anxiety Scale being a simple questionnaire is ideally suited to find out various grades of anxiety which could be correlated with somatic symptoms. Group A&B were matched evenly with regard to age. The results are almost identical and significant when compared to groups C and D, where besides being evenly matched, the results are not significant. However when one summarizes the results of all the groups the reduction in the anxiety levels is statistically significant at 0.01 level. Only 6.52% of the post-operative cases required psychiatric intervention to reduce the course and outcome of the surgery. Anxiolytic drugs in therapeutic doses were used to treat these cases (23.92%) with gratifying results.

**Conclusion :**

The incidence of pre-operative anxiety in surgical cases is 51.8%. Successful operative procedure reduces this incidence by 53.19%. The incidence of post-operative anxiety in surgical cases is 23.92%. Anxiolytic drug therapy in therapeutic doses supported by active insight oriented psychotherapy helps in the course and outcome of surgery in 23.92%. However only 6.52% require psychiatric intervention both prior and after surgery for a longer duration which is almost similar to the prevalence rates in general population (prevalence rate 7.3% (David, 1992). Routine use of benzodiazpine e.g. Diazepam as premedication can be curtailed in 93.48% of surgical cases.

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# Inter Correlation among Various Indices of SIS-II

**Manindra P. Singh and Bankey L. Dubey**

The inter correlation among eight SIS indices i.e. total number of Responses (R), Human responses (H), Animal responses (A), Anatomical responses (At), Sex responses (Sex), Movement responses (M), Most Typical responses (MT) and Rejection of Images (Rej.) was studied on male and female subjects of Adolescent age, Adult age, Later Adult age and Old age. High and positive correlation was observed among various indices of SIS -II. The findings are discussed in the paper.

Projective testing elicits information about the individual not readily available from history taking, interview, mental status examination or from other forms of testing. It also elicits information which is not consciously known to the patient, or reported as a problem. Usually significant, blocked material, will over-ride typical normative responses directly (manifest), or it will appear in symbolized imagery, similar to dream work (latent).

After initial success of SIS-I, the SIS-II was developed in 1980. It consists of 62 images (31 in series A and 31 in series B) printed on eight page booklet. In 1984 its video version was launched. It provides diagnostic and therapeutic aid. SIS adopts simple scoring system and has only eleven indices such as total Responses, Human responses, Animal responses, Anatomical responses, Sex responses, Movement responses, Most Typical responses, Typical responses, Atypical responses, Rejection of Images and Pathological responses. Unlike Rorschach and Holtzman test, SIS is comparatively very simple in scoring and interprelation. (Cassell, 1980; 1994, Cassell and Dubey, 1997).

In the inkblot test productivity usually varies because the subject is free to give as many responses as he likes. As early as in 1949, Cronback has warned about the uses and abuses of statistical designing in Rorschach. Fiske and Baughman (1953) have tried to see the relationship of Rorschach indices and found that 'R' is related with other Rorschach indices, yet the exact nature of relationship and its psychological significance is not properly understood.

The statistical procedures based on counting are much more suitable than other for inkblot variables. There is obviously much merit in using a procedure which leads to a single variant result, independent of the assumptions of the investigator about the equivalence of scores. Cronback emphasises that even if scores are normalised the median be used to indicate central tendency and chi-square to test the significance of difference of Rorschach scores. Dubey (1978, 1982) experimented on 300 subjects (100 normals, 100 neurotics and 100 schizophrenics) and controlled the productivity by making two groups with higher number of responses and lower number of responses. The results suggested that indices have positive correlation with number of responses. Keeping this point in view the SIS adopted only eleven indices and much emphasis is

M.P. Singh, Ph.D., Lecturer in Psychology, Desh Bhagat College, Dhuri, Sangrur (India) E-mail : dr_mpsingh@rediffmail.com and Bankey L. Dubey, Ph.D., DMSP, FIACP, Professor, Panjab University, Chandigarh-160015(India)E-mail:sisdubey@hotmail.com

given on content analysis. The present investigation is aimed to find out intercorrelation among eight important indices in four age groups. (Adolescents, Adults, Later adults and Aged).

**Material and Method :**

**Sample :**

480 male and female of four catagories (Adolescents13 to 15 years, Adult 20 to 22 years, Later adults 50 to 52 years years and Aged 60 to 62 Years) were selected on the basis of purposive sampling. All the eight subgroups consisted of 60 subjects.

**Tool :**

SIS- II was administered individually to all the subjects. They were explained the purpose of the study and were consented for the test. Correlation matrices were prepared and the findings are discussed accordingly.

**Objective :**

The objective of the study is to find out the inter-correlation amongst various indices of SIS -II.

**Results and Discussion :**

Table 1 shows the inter correlation among eight SIS-II indices i.e. total number of Responses (R), Human Responses (H), Animal Responses (A), Anatomical Responses (At), Sex Responses (Sex), Movement Responses (M), Most Typical Responses (MT) and Rejection of Images (Rej) of male adolescents. It shows that out of 28 inter relationships, seven were found to be significant at 0.01 level and one was found to be significant at 0.05 level. Total number of responses were highly correlated with animal responses (r=0.46), Movement responses (r=0.30) and Most Typical responses (r=0.40). It means increasing or decreasing of number of Responses affects the Animal, Movement and Most Typical responses.

Human responses were found to be highly correlated with Sex responses (r=0.38), Movement responses (r=0.40) and Most Typical responses (r=0.52) respectively which are significant at 0.01 level. It suggests that one who is giving more Human responses is likely to give high Sex responses, Movement responses and Most Typical responses. The Animal responses were found to be highly correlated with Movement responses (r =0.35 P<0.01). Significantly high negative correlation was found out between Sex responses and Rejection of Images (r=-0.45). It means male adolescents who give more Sex responses are likely to give very low Rejection of Images. No significant correlation were found between total number of Responses and Human responses, total number of Responses and Sex responses and total Responses and Rejection of images. Except the correlation between total Responses and Anatomical responses (r =-.04) all other correlations were found to be positive.

**Table 1**

**Correlation Matrix of Male Adolescents on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .24 | .46** | - .04 | .04 | .30* | .40** | .13 |
| Human | - | 1.00 | .05 | - .07 | .38** | .40** | .52** | -.18 |
| Animal | - | - | 1.00 | .16 | -.01 | .35** | - .16 | .11 |
| Anatomical | - | - | - | 1.00 | -.10 | .14 | -.02 | .03 |
| Sex | - | - | - | - | 1.00 | .16 | .19 | -.45** |
| Movement | - | - | - | - | - | 1.00 | .06 | .17 |
| Most Typical | - | - | - | - | - | - | 1.00 | .20 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

**Table 2**

**Correlation Matrix of Female Adolescents on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .18 | -.09 | .25* | .10 | .11 | .27* | -.38** |
| Human | - | 1.00 | -.01 | - .17 | .27* | .28* | .24 | -.26* |
| Animal | - | - | 1.00 | -.13 | .18 | -.05 | -.01 | .15 |
| Anatomical | - | - | - | 1.00 | .06 | .01 | .13 | -.25* |
| Sex | - | - | - | - | 1.00 | .25* | .21 | -.16 |
| Movement | - | - | - | - | - | 1.00 | -.14 | .25* |
| Most Typical | - | - | - | - | - | - | 1.00 | .08 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

Table 2 shows the responses given by female adolescents. Positive correlation coefficients were observed between total number of Responses and Anatomical responses (r = .25 P < 0.05), total number of Responses and Most Typical Responses (r =.27 P< 0.05) but negative correlation was observed with the total number of Responses and Rejection of Images (r = -0.38 P < 0.01 ). Human responses were significantly correlated with Sex responses (r = .28 P < 0.05 ) and also with Movement responses (r = .27 P < 0.05). Significant positive correlation was also observed between Sex responses and Movement responses (r = .25 P < 0.05 ). It further suggests that one who gives high Sex responses is likely to give more Movement responses. Total number of Responses, Human, Anatomical and Movement responses were found to be negatively correlated with Rejection of images. It means high number of Responses by female adolescents on these variables are likely to reduce Rejection of responses.

**Table 3**

**Correlation Matrix of Male Adults on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .14 | .22 | -.13 | .02 | .22 | -.08 | -.54** |
| Human | - | 1.00 | .33* | .04 | .58** | .59** | .61** | .06 |
| Animal | - | - | 1.00 | -.46** | .19 | .19 | .03 | -.19 |
| Anatomical | - | - | - | 1.00 | .26* | -.28* | .33** | .07 |
| Sex | - | - | - | - | 1.00 | .32* | .61** | .00 |
| Movement | - | - | - | - | - | 1.00 | .32** | .09 |
| Most Typical | - | - | - | - | - | - | 1.00 | .11 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level

** = Significant at 0.01 level

Table 3 shows the correlation matrix of eight variables found out on the basis of responses of 60 male adults. Significant correlation coefficients were observed between Human responses and Animal responses (r = .33 P < 0.05 ), Human responses and Sex responses (r = .58 P < 0.01), Human responses and Movement responses (r = .59 P<0.01), Human responses and Most Typical responses (r = .61, P < 0.01). Significant correlation were also observed between Aatomical responses and Sex responses (r = .26 P< 0.05), Anatomical responses and Most Typical responses (r = .33, P < 0.01 ). Sex responses were found to be significantly correlated with Movement responses, r = .32 P < 0.05 . Significant correlation between Sex responses and Movement responses

(r = .61 P < 0.01) was also observed. Animal responses were found to be negatively correlated with Anatomical responses (r=-0.46 P<0.01). Movement and Most Typical responses were also found to be significantly correlated (r=0.32 P<0.05). Rejection of images were found to be negatively correlated with total number of responses (r=-0.54 P<0.01).

Table 4 shows the correlation matrix of eight variables on the basis of responses given by 60 adult females. Total number of Responses were found to be significantly correlated with Human (r =0 .27 P < 0.05) whereas negatively correlated with Rejection of Images (r =-0.49 P< 0.01). It suggests that one who gives more responses is likely to give high Human responses but low Rejection of images. Significant relationship has also been observed between Human responses and Animal responses (r = 0 .61 P < 0.01), Human responses and Sex responses (r=0.27 P<0.05) Human responses and Movement responses ( r= 0.46 P < 0.01), Human responses and Most Typical responses (r = 0.31 P < 0.05). Relationship between Human response and Rejection of images was found to be negative. Significant positive correlation coefficients have also been observed between Animal responses and Movement responses ( r = 0.46 P < 0.01), Animal responses and Most Typical responses (r = 0.37 P < 0.05) . Anatomical responses were significantly correlated with Sex responses (r = 0.45 P < 0.01 ). Sex responses and Movement responses were significantly correlated (r = .42 P < 0.01 level). Significant correlation was also found between Movement and Most Typical responses (r = .31 P < 0.05 ). It suggests if one shows high Movement, he is expected to give more Most Typical responses.

**Table 4**

**Correlation Matrix of Female Adults on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .27* | -.02 | .23 | -.14 | -.22 | .02 | -.49** |
| Human | - | 1.00 | .61** | .24 | .27* | .46** | .31* | -.27* |
| Animal | - | - | 1.00 | -.21 | .04 | .46** | .37** | -.004 |
| Anatomical | - | - | - | 1.00 | .45** | .03 | .10 | -.05 |
| Sex | - | - | - | - | 1.00 | .42** | -.06 | -.20 |
| Movement | - | - | - | - | - | 1.00 | .31** | -.14 |
| Most Typical | - | - | - | - | - | - | 1.00 | .03 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

Table 5 shows the inter correlation among eight variables of male of later adult age group. Significant correlation coefficients were observed between total number of Responses and Human responses (r = .66, P < 0.01 ), total number of Responses and Animal responses (r =.43P< 0.01 ), total number of Responses and Movement responses (r =.28 P< 0.05 ). These results suggest that one who gives more response is likely to give more Human, Animal and Movement responses. Human responses were found to be significantly correlated with Animal responses (r=0.35P<0.05 ) and Movement responses (r =0.33P<0.01). Animal responses were significantly correlated with Movement responses ( r = 0.43P<0.01). Significant negative correlation coefficients were also observed between Anatomical and Movement responses (r=-.26 P<0.01) and Anatomical and Most Typical responses (r = -.49 P< 0.01) . It suggests that if one gives high number of Anatomical responses, he is likely to give less Movement and Most Typical responses. Rejection of Images were found to be negatively correlated with all the variables such as total number of Responses, Human, Animal, Anatomical, Sex, Movement and Most Typical responses though not significant. It suggests that low number of responses in any one of the SIS-II variables leads to high Rejection of Images.

**Table 5**

**Correlation Matrix of Male Later Adults on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .66** | .43** | - .04 | -.08 | .28* | -.03 | -.16 |
| Human | - | 1.00 | .35** | - .001 | .09 | .33** | -.04 | -.18 |
| Animal | - | - | 1.00 | -.32 | -.07 | .43** | - .12 | -.21 |
| Anatomical | - | - | - | 1.00 | .22 | -.26* | -.49** | -.07 |
| Sex | - | - | - | - | 1.00 | -.16 | -.05 | -.03 |
| Movement | - | - | - | - | - | 1.00 | -.08 | -.22 |
| Most Typical | - | - | - | - | - | - | 1.00 | -.15 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

Table 6 shows the correlation matrix of eight variables on the basis of responses given by 60 female of later adult age. Significantly high correlation coefficients were observed between total number of Responses and Animal responses ( r = .76 P < 0.01), total number of Responses and Movement (r=.24 P<0.05) and total Responses and Most

Typical responses (r=.55 P<.01). Human responses were significantly correlated with Movement and Most Typical responses (r = .59 P < 0.01 and r = .42 P < 0.01 respectively). Animal responses were significantly correlated with Most Typical responses (r = .28 P < 0.05). Negative correlation coefficients were observed between Animal and Anatomical (r = -.39 P<0.01), Animal and Sex (r = -.41 P<0.01). Anatomical responses were found to be significantly correlated with Sex (r = 0.36 P < 0.01). Rejection of images were found to be negatively correlated with almost all the variables, same as in other sub groups.

**Table 6**

**Correlation Matrix of Female Later Adults on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .13 | .76** | - .26* | -.26* | .24* | .55** | -.35** |
| Human | - | 1.00 | .02 | - .07 | .23 | .59** | .42** | -.50 |
| Animal | - | - | 1.00 | -.39** | -.41** | .13 | .28* | -.20 |
| Anatomical | - | - | - | 1.00 | .36** | -.32* | .08 | -.27* |
| Sex | - | - | - | - | 1.00 | .01 | .12 | .02 |
| Movement | - | - | - | - | - | 1.00 | .004 | -.48** |
| Most Typical | - | - | - | - | - | - | 1.00 | -.42 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

Table 7 shows the inter correlation coefficients of all the eight variables on the responses given by 60 male old aged persons. Negative correlations were observed between total Responses and Sex, total Responses and Movement and total Responses and Rejection of Images (r=-.36,-.27 and -.69 respectively). Human responses were negatively correlated at 0.01 level with Animal (r =-.44) whereas positively correlated with Sex responses as well as with Anatomical responses(r=.59 and .31 P< 0.01) respectively, which indicates that if an old male person gives high Human responses then he is likely to give more Anatomical responses. Animal responses were found to be negatively correlated with Anatomical (r =-.35 P<0.01) which shows that old person who gives more Animal responses is likely to give less Anatomical responses whereas animal responses were negatively correlated with Sex responses (r =.41 P< 0.01). Movement responses were positively correlated with Rejection of images (r = .41 P < 0.01) which suggest that high Movement may lead to Rejection in this group.

**Table 7**

**Correlation Matrix of Male Old Age on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | -.06 | .05 | .20 | -.36** | -.27* | -.12 | -.69** |
| Human | - | 1.00 | -.44** | .31* | .59** | .18 | -.23 | -.08 |
| Animal | - | - | 1.00 | -.35** | -.41** | .12 | .04 | -.06 |
| Anatomical | - | - | - | 1.00 | .16 | -.19 | .01 | -.01 |
| Sex | - | - | - | - | 1.00 | .23 | -.02 | .25 |
| Movement | - | - | - | - | - | 1.00 | -.03 | .41** |
| Most Typical | - | - | - | - | - | - | 1.00 | -.05 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

**Table 8**

**Correlation Matrix of Female of Old Age on Eight SIS-II Indices**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .27* | .09 | .21 | .21 | .15 | .25 | -.51** |
| Human | - | 1.00 | .23 | .19 | .42** | .59** | -.07 | -.37 |
| Animal | - | - | 1.00 | .001 | -.14 | .31* | -.17 | -.004 |
| Anatomical | - | - | - | 1.00 | .09 | -.07 | .32* | -.02 |
| Sex | - | - | - | - | 1.00 | .16 | .16 | -.16 |
| Movement | - | - | - | - | - | 1.00 | -.03 | -.32** |
| Most Typical | - | - | - | - | - | - | 1.00 | -.20 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

Table 8 shows the correlation matrix of eight indices based on the responses given by 60 old females. Total number of Responses were found to be highly correlated with Human response (r = .27 P < .05 ) and negatively correlated with Rejection of images (r = -.51 ). Human responses were found to be significantly correlated with Sex (r = .42 P < 0.01 ) and Movement (r = .59 P < 0.01 ) whereas negatively correlated with Rejection of images (r = -.37 P < 0.01 ). Animal responses were significantly correlated with Movement (r = .31 P < 0.05 ). Anatomical responses were correlated with Most Typical responses (r = .32 P < 0.05 ). Movement response were found to be negatively correlated with Rejection of images (r = -.32 P < 0.01 ). It suggests that the old female who is giving high Movement responses is likely to give low Rejection of images.

Table 9 shows the inter-correlation among eight variables on the basis of the responses given by male adolescents, adults, later adults and old aged persons. Significant positive correlation was found between total number of Responses and Human responses (r=.31 P < 0.01 ), total number of Responses and Animal responses (r=0.19 P < 0.05 ), Human responses and Sex ( r = 0.35 P < 0.01), Human responses and Most Typical responses (r=.32 P < 0.01), Human and Movement ( r = 0.34 P < 0.01), Animal and Movement responses (r = .29 P<0.01), Anatomical responses and Sex responses (r=.21 P<.05), Anatomical responses and Movement responses(r = .24 P<.05). Significant negative correlation was also observed between total number of Responses and Rejection of images ( r = -.31 P < 0.01 ).

**Table 9**

**Correlation Matrix of Total Males on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .31** | .19* | .07 | -.04 | .05 | -.01 | -.31** |
| Human | - | 1.00 | .06 | .10 | .35** | .34** | .32** | -.01 |
| Animal | - | - | 1.00 | -.29** | -.15 | .29** | -.05 | -.002 |
| Anatomical | - | - | - | 1.00 | .21* | .24* | .17 | .05 |
| Sex | - | - | - | - | 1.00 | .07 | .07 | .06 |
| Movement | - | - | - | - | - | 1.00 | .07 | .12 |
| Most Typical | - | - | - | - | - | - | 1.00 | .06 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

Table 10 depicts the correlation on the basis of responses given by total female subjects (240 adolescent, adult, later adult and old age females). Significant correlations were observed between total number of Responses and Animal responses (r=.28 P < 0.01), total number of Responses and Most Typical responses (r=.35 P < 0.01), total number of Responses and Human (r=.19 P < 0.05 ). It suggests that one who gives more responses is likely to give more Human, Animal and Most Typical responses. Whereas significantly negative correlation has been observed between total number of Responses and Rejection of images (r = -.36 P < 0.01 ). It shows that if one gives more number of Responses, he is likely to give low Rejection of images.

Human responses were also significantly correlated with Animal (r=27 P < 0.01 ), Sex (r =.29 P < 0.01 ), Movement (r = .49 P < 0.01 ) Most Typical responses (r = .28 P < 0.01) but negatively correlated with Rejection of images (r = -.38 P < 0.01). It suggests that if one gives more Human responses then he is likely to give more number of Responses, Animal, Sex, Movement and Most Typical responses. Significant correlation was also observed between Animal and Movement responses (r = .27 P < 0.01 ); and Anatomical and Sex responses (r =.31 P < 0.01). It suggests if one gives more Animal and Anatomical responses, he is likely to give more Movement and Sex responses respectively. Similarly, significant positive correlation was found between Sex and Movement responses (r= .23 P<0.05 ).

**Table 10**

**Correlation Matrix of Total Females on Eight SIS-II Indices**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .19* | .28** | - .06 | -.02 | .04 | .35** | -.36** |
| Human | - | 1.00 | .27** | .07 | .29** | .49** | .28** | -.38** |
| Animal | - | - | 1.00 | -.25** | -.11 | .27** | .15 | -.07 |
| Anatomical | - | - | - | 1.00 | .31** | -.06 | .15 | .05* |
| Sex | - | - | - | - | 1.00 | .23* | .11 | -.09 |
| Movement | - | - | - | - | - | 1.00 | .06 | -.30** |
| Most Typical | - | - | - | - | - | - | 1.00 | -.15 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

Table 11 shows the correlation matrix of eight variables of all the 480 males and females of four groups. Significant positive correlation coefficients were observed between total number of Responses and Human responses (r=.25 P < 0.05); and total

number of Responses and Animal responses (r = 0.24 P <0.05). It suggests that one who is giving more responses is likely to give more Human and Animal responses. High negative correlation was found between number of Responses and Rejection of images (r = -.34 P < 0.01).

Table 11 suggests that Human responses were highly correlated with Sex responses (r =.29 P < 0.01), Movement responses (r = .42 P < 0.01) and Most Typical responses (r =.30 P < 0.01) but negatively correlated with the Rejection of images ( r = -.19 P < 0.05). It further suggests that if human responses are more then Sex, Movement and Most Typical responses are likely to be more.

**Table 11**

**Correlation Matrix of Total Subjects on Eight SIS-II Indices**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
|---|---|---|---|---|---|---|---|---|
| Indices | No. of Responses | Human | Animal | Anatomical | Sex | Movement | MT | Rej. of Images |
| No. of Responses | 1.00 | .25* | .24* | .06 | -.05 | .06 | .18 | -.34** |
| Human | - | 1.00 | .16 | .09 | .29** | .42** | .30** | -.19* |
| Animal | - | - | 1.00 | -.28** | -.19* | .29** | .02 | -.03 |
| Anatomical | - | - | - | 1.00 | .24* | -.15 | .16 | .05 |
| Sex | - | - | - | - | 1.00 | .07 | .09 | -.01 |
| Movement | - | - | - | - | - | 1.00 | .05 | -.12 |
| Most Typical | - | - | - | - | - | - | 1.00 | -.04 |
| Rej. of Images | - | - | - | - | - | - | - | 1.00 |

* = Significant at 0.05 level ** = Significant at 0.01 level

High positive correlation was found between Animal responses and Movement responses (r =.29 P < 0.01). It suggests that one who gives more number of Animal responses is likely to give more Movement responses. Animal responses were negatively correlated with Anatomical responses ( r = -.28 P < 0.01) and Sex responses (r = -.19 P < 0.05 ). It suggests that one who gives more Animal responses is likely to give less Anatomical and Sex responses. Table 11 also indicates that Anatomical responses were highly correlated with Sex responses ( r = .24 P < 0.05). It suggests that one who gives more Anatomical responses is likely to give more Sex responses.

**Conclusion :**

High and positive correlation coefficients were observed among the various indices of SIS-II except rejection of images. Because rejection of images was found to be negatively

correlated with number of responses and other indices. Significant positive correlations were observed between number of Responses, Human responses, Animal responses, Anatomical responses, Sex responses, Movement responses and Most Typical responses. When number of Responses increase, it gives rise to H, A, At, Sex, Movement and Most Typical responses and lower down Rejection of images.

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# Diagnostic Value of SIS-I and EDI-2 Tests in the Obese Patients- Presentation of a Clinical Case

**Paola Nicolini**

This research concerns corporeal perception in 41 obese female subjects, under diet therapy. A possible organic cause of the weight increase has been excluded. The projective SIS-I and EDI-2 Tests have been administered to have a psycho diagnostic evaluation. The main objective of the presentation is to compare the results of the two tests and carrying out the thorough qualitative and quantitative analysis of the SIS-I protocols. At the end a case of 37 years old female subject using SIS-I and EDI-2 is discussed for the better understanding of the tests.

The SIS images are stimulus material in the form of semi-ambiguous inkblots, which involve body and organ imagery. Unlike the Rorschach procedure, the designs are not symmetrical. They are a bridge between fully ambiguous images and human figure pictures (e.g. TAT cards), or drawings by clients. Marcia Wilkinson of London Migraine Clinic, pioneered British headache art had provided the first examples of the perceptual distortion, long observed in classical migraines. She found that many paintings and drawings of headache by sufferers had a pattern of zigzag lines representing visual abnormalities associated with migraines (Cassell, 1965, 1980, 1988; Garner,1991). If this theory is applicable to the Somatic Inkblot Series, then it is presumed that subjects suffering from physical illnesses, psychosomatic illnesses and conversion reactions will perceive much more anatomical structure in the inkblots. Persons suffering from Obesity have shown preoccupation with body imagery(Sguazzin and Ferro, 1998 and Nicolini, 2000). In general, somatic inkblot images should elicit mostly healthy anatomical responses in individuals who are in good health.

For physicians, therapists and researchers, the body, its organ systems and its perceived functions are “doorways to the mind.” Observing and assessing how people perceive or misperceive body and organ function can learn about their innermost thoughts and feelings. What they see in ambiguous and semi-ambiguous inkblots shows how they see themselves, the quality of their life and lifestyle, their adjustment to conflict, their coping skills and their view of the reality of life. The Somatic Inkblot Series can help therapists more sensitively “hear” a suffering individual’s cry for help, the “inner cry” that is not only hidden from others, but often hidden from one’s own conscious awareness as well. This is the “magic”; the unique and distinguishing feature of projective testing (Cassell and Dubey,1997).

Since projective tests are not based on verbal communication, they more effectively penetrate a person’s “outer shell” of defenses and surface behaviors. Unlike personality and intelligence tests, projective tests do not require reading questions or manuals, so

Paola Nicolini, Clinical Psychologist, Via E. Fermi,14, 23871 Lomagna (LC) Italy Tel./ Fax: +39-039-9220187 , E-Mail: paola.nicolini@email.it

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they more directly access mental processes. They use the language of dreams, visual imagery and symbolic thought, the most basic forms of thinking and expression. Projective tests speak the language of repression and bring whatever is buried in the mind closer to consciousness, so it is accessible for processing (Cassell and Dubey 1997).

By developing a practiced eye and ear for this imagery, therapists can more directly share the perceptual world of their patients with less interference, and fewer variables than in structured interviews or so-called "paper and pencil tests." If, as the saying goes, "a picture is worth a thousand words," inkblots are picture recognition tests, and therefore potentially more powerful than verbal interviews and tests. Therapists willing to more directly know and experience the patient's psychic pain will be rewarded with clear understanding of the psycho-dynamics involved, and therefore, be able to provide more effective therapy.

The present study is a modest attempt to find out the pattern of responses in obese patients.

**Material and Method** :

**The Somatic Inkblot Series-I** (SIS-I) and **Eating Disorder Inventory** (EDI – 2) tests were administered individually to obese women after excluding any organic reasons. These tools have been chosen for their projective value to have precious information on symptomatology and subjective experience of obesity. The SIS helps in understanding the dynamics lying with obesity that brings a woman suffering such disease to be in disharmony with her body.

Eating Disorder Inventory (EDI – 2) by D. M Garner is a questionnaire consisting of:

1. EDI – SC or EDI Symptom Checklist. It is a type of evaluation supplying detailed information about the frequency of specific symptoms of eating disorder, such as stuff oneself, cause vomiting, use of laxatives, slimming pill or diuretics. Questions concerning both menstrual anamnesis and the use of habitual medicines prescribed by doctors are also asked.
2. The real questionnaire, made up by two different parts. The first part asks about personal data, heights, present weight, maximum and minimum weight overtook, maximum weight lost, wished weight, at which age weight problems started and parents profession. The second part is made by 91 items valued using Likert scale ranging from 1-6 (1 never to 6 always). Items are designed to measure the attitude, feelings and behaviours towards self and towards food.
3. A sheet of profile the scores on 11 scales are reported: Drive for thinness, Bulimia, Body Dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal Distrust, Interceptive awareness, Maturity Fears, Asceticism, Impulse Regulation, Social Insecurity.

The EDI – 2 administration was done to assure the exclusion of organic causes of weight increase and eating disorder such as Anorexia and Bulimia.

Special consideration is given to "Body Dissatisfaction" and "Impulse Regulation" scales because they influence the level of subjective body satisfaction and the tendency to act related to such experience. The reported mean in the present study on these scales are either high or low (BD = 19,9 IR= 4,5) than the mean of Italian normative sample (BD = 12,1 IR = 5,2).

**Hypothesis :**

The following three hypotheses was formulated:

1. Obese women are dissatisfied with their own body, have lived with bulky size and feel not very feminine.
2. Obese women have a reduced body consciousness and have difficulty in a harmonious perception of their own body.
3. Obese women consider their own body as a protection from the environment.

**The Subjects :**

**Age :** Forty-One obese women in the age range of 22 to 60 (mean age = 45) form the sample. The 3 subjects were in the age range of 20 to 30, 8 in the range of 31 to 40, 17 in the range of 41 to 50 and 13 in the range of 51 to 60. **Education** wise 6 had elementary schooling, 12 secondary schooling, 22 up to high school and 1 was graduate. Their **Body Mass Index (BMI)** was I class obesity (n=22), II class obesity (n=13) and III class obesity (n=6)

**Procedure :**

The tests were administered individually to each subject by appointment. The EDI-2 was administrated first, followed by the SIS-I Test after a week. The EDI-2 has helped in establishing rapport a sort of confidential relationship between the psychologist and the patient. Such relationship always helps in the administration of projective test.

The SIS-I Test was always administered in the same room individually. The subject was alone during testing. Each card was shown in numerical order one after the other. No card was omitted. The instructions were always given in the same way. During the administration of the SIS-I Test, a non-structured interview was done, in which the subject often is able to make spontaneous association of ideas that concern his/her affective and interpersonal world. For each card the responses were noted along with the reaction time.

**Results and Discussion :**

The SIS-I Test standardization is still in the pipeline in Italy. Therefore, it is not possible to have the comparison with Italian normative sample. Nevertheless, a comparison has been made between the mean of indices of obese sample and mean of indices of

Italian sample, which will be the part of normative sample.

Table 1 suggests that the obese women of the present study differ from the subjects of Italian sample. They have given more A (Animal), AT (Atypical), ATR (Anxiety – Threat Rating) responses and less At (Anatomical), Sex, MT (Most Typical) and T (Typical) responses in comparison of Italian sample. More Rejection on card No. 17, 19 and 20 has also been observed in the present study. They may have difficulty to perceive different parts of their own bodies (fewer At and T responses) although they could perceive a whole human gestalt. In particular they have shown low concern of the genitals and reproductive organs. The difficulty to perceive "Typical Responses" has given rise to body and anatomy related Atypical responses. The Pathological Score shows the presence of anxiety and worry often masked by using Undoing. 5 women have rejected Card 20, probably because it evokes affects and being perceived as potentially threatening image.

**Table 1**

**Mean and S.D. on SIS-I Indices of obese women**

| | Obese women (N=41) | | Italian Normal sample (N=86) | |
|---|---|---|---|---|
| | **Mean** | **SD** | **Mean** | **SD** |
| R | 32 | 7.8 | 30.6 | 3.2 |
| H | 6.7 | 2.9 | 6.4 | 1.6 |
| A | 8.7 | 3.2 | 5.9 | 1.3 |
| At | 8.8 | 3.6 | 13.6 | 2.2 |
| Sex | 1.4 | 1.6 | 2.8 | 1.4 |
| M | 3.9 | 2.7 | 4.1 | 1.9 |
| MT | 4.3 | 1.3 | 5.0 | 1.1 |
| T | 14.4 | 3.5 | 21.0 | 2.3 |
| AT | 13.1 | 6.8 | 4.6 | 1.3 |
| Rej | 0.3 | 0.8 | 0.06 | 0.2 |
| PAS | 0.4 | 0.8 | 0 | 0.0 |
| D | 0.7 | 1.2 | 0.4 | 0.7 |
| ATR | 3.9 | 2.4 | 1.0 | 0.7 |
| P | 0.5 | 1.0 | 0 | 0 |

Table 2 shows a significant difference in sub-scales DT, BD, BU, IR between two groups. In particular, obese women are more worried for their diet, body weight and have fear of increase of weight. Moreover, there is a tendency to think and have uncontrollable overeating. In the process of controlling their behavior, they are found to do self-induced vomiting, laxative, improper use of diuretics and excessive physical exercises. Furthermore, there have dissatisfaction for their body shape in general and for the size

of different parts of the body (belly, hips, thighs) in particular. At last, obese women have more difficulties when facing every day situations, which may cause anxiety and uneasiness.

**Table 2**

**Means, S.D. and Significant Differences, on EDI-2 Sub-Scales between Obese Women and Italian Normal Sample**

| | Obese women (N=41) | | Italian Normal sample (N=86) | | |
|---|---|---|---|---|---|
| | **Mean** | **SD** | **Mean** | **SD** | **P** |
| DT | 10.9 | 5.5 | 7.1 | 6.3 | 0,001 |
| BU | 4.6 | 5.3 | 2.2 | 2.8 | 0,01 |
| BD | 19.9 | 10.6 | 12.1 | 7.7 | 0,001 |
| IN | 7.2 | 7.6 | 5.2 | 4.9 | NS |
| P | 4.5 | 4.5 | 3.2 | 3.1 | NS |
| ID | 5.0 | 4.8 | 3.7 | 3.6 | NS |
| IA | 7.5 | 8.7 | 5.2 | 4.8 | NS |
| MF | 5.7 | 6.3 | 5.5 | 3.9 | NS |
| ASC | 6.1 | 3.8 | 5.1 | 3.3 | NS |
| IR | 4.5 | 6.5 | 5.2 | 5.1 | 0,05 |
| SI | 5.8 | 5.9 | 4.5 | 3.6 | NS |

**Table 3**

**Responses Perceived by Subjects on Card 1**

| | | | |
|---|---|---|---|
| Card 1 | Animal | Bull's muzzle | 7 |
| | | Wolf/ Dog's muzzle | 5 |
| | | Other animal's muzzle | 6 |
| | | Animal (black area) | 8 |
| | | Birds (red areas) | 3 |
| | | Cartoon | 2 |
| | | Other | 3 |
| | Human | Human face | 4 |
| | | Other | 3 |
| | Other | Mask | 5 |
| | | Other | 8 |

Atypical responses given by a few subjects has been placed under category "Others".

The response frequency of each Card of the SIS-I Test is shown ahead in the following tables.

As it can be noticed, 44% of the obese women saw in the whole figure an animal muzzle, 10% saw a human face and 12% saw a mask. These percentages suggests that majority (66%) of the sample subjects have a consciousness of the head, otherwise only a low percentage (10%) of the subjects are able to elaborate a subjective experience of their own ability of cognitive perception.

**Table 4**

**Responses Perceived by Subjects on Card 2**

| | | | |
|---|---|---|---|
| Card 2 | Whole Human Gestalt | Stylised human figure | 8 |
| | | Human figure in movement or smiling | 8 |
| | | Clown | 8 |
| | | Cartoon | 1 |
| | | Masked human figure | 1 |
| | Human | Mouth / smile | 14 |
| | | Other | 5 |
| | Anatomical | Heart | 15 |
| | Animal | Bird | 4 |
| | | Animal | 4 |
| | | Flying insect | 3 |
| | | Other | 2 |
| | Other | Cloud | 3 |
| | | Other | 3 |

Atypical responses given by a few subjects has been placed under category “Others”.

Whole human gestalt responses are the more frequent (61%), though 24% subjects perceived clown / cartoon. It is important to put in evidence these last responses because they carry more hidden affective contents, which will be subsequently explained. Heart (37%) and “mouth / smile” (34%) have been the most frequent responses at the middle red area. It suggests an adequate cardiac and oral consciousness.

Most of the subjects perceived “two gestalt” (88%): 39% of these saw two gestalt without movement or stylised, 49% saw two dancing or talking figures. 12% of the sample saw “two hearts” in the red area. These responses indicate that almost half of the sample is able to establish relationship between two human figures. This further suggest that they are able to maintain good emotional contacts.

**Table 5**

**Responses Perceived by Subjects on Card 3**

| | | | |
|---|---|---|---|
| Card 3 | 2 Gestalt | Without movement / stylised | 16 |
| | | With movement / Talking | 20 |
| | Human | 1 Human gestalt | 1 |
| | | Other | 5 |
| | Anatomical | Hearts | 5 |
| | | Other | 0 |
| | Other | Other | 11 |

Atypical responses given by a few subjects has been placed under category "Others".

**Table 6**

**Responses Perceived by Subjects on Card 4**

| | | | |
|---|---|---|---|
| Card 4 | Gestalt Umana | Stylised / without movement female figure | 5 |
| | | Female figure with movement | 14 |
| | | Stylised / without movement male figure | 4 |
| | | Male figure with movement | 2 |
| | | Clown | 6 |
| | | Cartoon | 2 |
| | Human | Mouth / smile | 6 |
| | | Moustaches | 3 |
| | | Other | 2 |
| | Vegetable | Apple | 26 |
| | | Other | 6 |
| | Animal | Snakes | 3 |
| | | Other | 1 |
| | Other | Other | 9 |

Atypical responses given by a few subjects has been placed under category "Others".

Seventy Six percent (76%) of the subject saw a human gestalt and 46% of them were able to perceive them as female. 15% saw a “mouth” in the gestalt, while 7% saw “moustaches”. The upper figure was seen as an “apple” by 63% of subjects.

Eighty four percent (84%)of the subjects perceived Animal response: 41% saw a “turtle”, 32 % a “bird”. 32% of the sample saw a human gestalt in the whole figure, but only 5% saw a “heart” in the central red area.

**Table 7**

**Responses Perceived by Subjects on Card 5**

| | | | |
|---|---|---|---|
| Card 5 | Human Gestalt | Masked human figure | 8 |
| | | Character | 3 |
| | | Cartoon | 1 |
| | | Human figure | 1 |
| | Human Figure | Children | 9 |
| | | Cartoon | 1 |
| | | Others | 2 |
| | Anatomical | Heart | 2 |
| | | Other | 1 |
| | Animal | Turtle | 17 |
| | | Winged animal | 13 |
| | | Other | 4 |
| | Other | Phantom | 4 |
| | | Animal skin / carpet | 3 |
| | | Other | 4 |

Atypical responses given by a few subjects has been placed under category "Others".

**Table 8**

**Responses Perceived by Subjects on Card 6**

| | | | |
|---|---|---|---|
| Card 6 | Anatomical | Heart | 12 |
| | | Lungs | 8 |
| | | Other | 5 |
| | Animal | Birds | 26 |
| | | Seals | 6 |
| | | Other | 9 |
| | Human | Eyes | 3 |
| | Vegetable | Other | 5 |
| | Other | Nest | 2 |
| | | Other | 7 |

Atypical responses given by a few subjects has been placed under category “Others”.

Eighty percent (80%) of the subjects gave Animal as a first response with 49% saw it as a cardiac and/or respiratory organ. 29% saw a “heart” in the lower red area, 20% saw “lungs” in the black area.

**Table 9**

**Responses Perceived by Subjects on Card 7**

| | | | |
|---|---|---|---|
| Card 7 | Anatomical | Heart | 28 |
| | | Lungs | 4 |
| | | Female genitalia | 4 |
| | | Throat / Digestive tube | 3 |
| | | Other | 6 |
| | Human | Humanoid (black area) | 5 |
| | | Other | 5 |
| | Animal | Animal with horns / ears | 9 |
| | | Other animal | 5 |
| | | Other | 2 |
| | Vegetable | Other | 3 |
| | | Fire / Explosion | 5 |
| | Other | Other | 8 |

Atypical responses given by a few subjects has been placed under category "Others".

**Table 10**

**Responses Perceived by Subjects on Card 8**

| | | | |
|---|---|---|---|
| Card 8 | Anatomical | Heart | 24 |
| | | Thorax / Thoracic cage | 21 |
| | | Rib | 7 |
| | | Lungs | 5 |
| | | Stomach | 3 |
| | | Other | 1 |
| | Animal | Sea – horse | 10 |
| | | Other animal | 12 |
| | Other | Other | 6 |

Atypical responses given by a few subjects has been placed under category "Others".

Heart related Anatomical responses were most frequently perceived by (68%), followed by "lungs" (10%) and female genitals (10%). It has to be noticed that 12% of the subjects saw "fire" and "explosion" contents, which may indicate their aggressive attitude, might be directed towards their own self.

Most of the subjects gave at least one Anatomical response: 51% saw a "thorax" or

"thoracic cage" in whole figure. In the red area 59 % saw a "heart", 12% "lungs" and 7% "stomach".

**Table 11**

**Responses Perceived by Subjects on Card 9**

| | | | |
|---|---|---|---|
| Card 9 | Anatomical | Kidneys | 20 |
| | | Lungs | 17 |
| | | Viscera | 7 |
| | | Urogenital System | 3 |
| | | Ovaries | 3 |
| | | Other | 6 |
| | | Other | 10 |

Atypical responses given by a few subjects has been placed under category "Others".

Forty nine percent (49%) of the subjects saw "kidneys", while 41% saw "lungs". 7% noticed a female sexual content ("ovaries").

**Table 12**

**Responses Perceived by Subjects on Card 10**

| | | | |
|---|---|---|---|
| Card 10 | Human | Mouth / Lips | 33 |
| | | Human face | 3 |
| | | Other | 3 |
| | Anatomical | Stomach | 12 |
| | | Oesophagus | 5 |
| | | Intestine | 4 |
| | | Other | 9 |
| | | Bag | 4 |
| | | Other | 23 |

Atypical responses given by a few subjects has been placed under category "Others".

A large percentage saw "a mouth" (80%), suggesting high oral consciousness. This may indicate their concern of the body image and to some extent their anxiety and feeling of insecurity with body imagery. Among the Anatomical responses, 29% of subjects saw a "stomach", 12% saw an "oesophagus" and 10% "intestine".

The low frequency of responses concerning the gastro-intestinal tract (12%), suggests that there is a low projective consciousness of this body part. This may also suggest their unconscious desire to avoid painful perception of body imagery though anatomical imagery is common perception on this card.

**Table 13**

**Responses Perceived by Subjects on Card 11**

| | | | |
|---|---|---|---|
| Card 11 | Anatomical | Intestine | 5 |
| | | Other | 5 |
| | Human | Face (s) | 7 |
| | | Cartoon | 3 |
| | | Other | 6 |
| | Animal | Animal muzzle | 9 |
| | | Winged animal | 4 |
| | | Prawns | 4 |
| | | Eyes | 3 |
| | | Other | 5 |
| | Other | Pelouche (Teddy bear) | 3 |
| | | Other | 6 |

Atypical responses given by a few subjects has been placed under category "Others".

**Table 14**

**Responses Perceived by Subjects on Card 12**

| | | | |
|---|---|---|---|
| Card 12 | Anatomical | Female reproductive system | 10 |
| | | Other | 9 |
| | Vegetable | Flower / plant | 10 |
| | Animal | Winged animal | 5 |
| | | Other | 5 |
| | Other | Clothes | 4 |
| | | Other | 10 |

Atypical responses given by a few subjects has been placed under category "Others".

Twenty four percent (24%) subjects perceived the female reproductive system on this card. Another 24% of subjects saw a "flower" or "plant" depicting symbolic representation of reproductive aspect.

Twelve percent (12%) of subject recognise perineal area and 24% saw a "heart". No body responded external female genitalia. The plausible explanation of avoiding female genitalia might indicate their unconscious conflict with their ugly body concept and painful perception of own body percept.

**Table 15**

**Responses Perceived by Subjects on Card 13**

| | | | |
|---|---|---|---|
| Card 13 | Human | Buttocks or “rear” | 5 |
| | Anatomical | Heart | 10 |
| | | Other | 4 |
| | Animal | Cockroach / insect | 7 |
| | | Other | 4 |
| | Vegetable | Flower / Fruit | 9 |
| | | Leaf | 7 |
| | | Other | 2 |
| | Other | Volcano | 3 |
| | | Other | 5 |

Atypical responses given by a few subjects has been placed under category “Others”.

**Table 16**

**Responses Perceived by Subjects on Card 14**

| | | | |
|---|---|---|---|
| Card 14 | Anatomical | External female genitalia | 11 |
| | | Other | 1 |
| | Animal | Cockroach / Insect | 8 |
| | | Animal with pincers | 8 |
| | | Other | 8 |
| | Vegetable | Flower | 3 |
| | | Other | 1 |
| | Other | Other | 8 |

Atypical responses given by a few subjects has been placed under category “Others”.

Only 27% of the obese women were able to perceive external female genitalia the most common response on this card. It might further validate the explanation of avoidance on Card 13 suggesting a limited consciousness of this body part. Majority of subject (59%) gave an Animal response (20% saw a “cockroach”, 20 % an animal with pincers). Perceiving Animal response on this card might indicate their frustration and aggressive attitude towards their own body percept.

**Table 17**

**Responses Perceived by Subjects on Card 15**

| | | | |
|---|---|---|---|
| Card 14 | Anatomical | Human spinal cord | 32 |
| | Other | Totem | 3 |
| | | Pots | 3 |
| | | Other | 14 |

Atypical responses given by a few subjects has been placed under category "Others".

Responses relative to human spinal cord were the most frequent (78%). 7% of the subject saw a "totem", with phallic content. This might indicate their positive desire to have normal family life.

**Table 18**

**Responses Perceived by Subjects on Card 16**

| | | | |
|---|---|---|---|
| Card 16 | Animal | External female genitalia | 11 |
| | | 2 rabbits | 6 |
| | | 2 dogs / wolfes | 3 |
| | | 2 animals with horns | 4 |
| | | 2 crabs | 3 |
| | | 2 insects | 3 |
| | | Other 2 animals | 11 |
| | | Skulls | 5 |
| | | Other | 3 |
| | Human | Eyes | 3 |
| | | Other | 2 |
| | Other | Food | 3 |
| | | Other | 4 |

Atypical responses given by a few subjects has been placed under category "Others".

Only 7% of the subjects perceived "eyes". A large percentage of responses had an Animal content: 85% saw two animals. These are healthy response on this card.

**Table 19**

**Responses Perceived by Subjects on Card 17**

| | | | |
|---|---|---|---|
| Card 17 | Anatomical | Human spinal cord | 20 |
| | | Pelvis | 19 |
| | | Penis | 7 |
| | | Other | 6 |
| | Animal | Ray | 4 |
| | | Other | 2 |
| | Vegetable | Plant / flower | 6 |
| | | Mushroom | 3 |
| | | Other | 2 |
| | Other | Other | 5 |

Atypical responses given by a few subjects has been placed under category "Others".

The most frequent responses had an Anatomical content: 49% of subjects saw a "human spinal cord", 46% "pelvis" and 17% perceived a "penis". These are healthy response on this card.

**Table 20**

**Responses Perceived by Subjects on Card 18**

| | | | |
|---|---|---|---|
| Card 18 | Human | Threatening Face | 4 |
| | Animal | Owl / Bat | 3 |
| | | Other | 2 |
| | | Animal's muzzle | 3 |
| | | 2 wolves muzzles | 4 |
| | | 2 other animal's muzzles | 4 |
| | | Other | 1 |
| | Other | Mask | 12 |
| | | Castle | 7 |
| | | Other | 10 |

Atypical responses given by a few subjects has been placed under category "Others".

A large percentage of the subjects (73%) projected responses concerning the "head". To be noticed the moderate frequency of "mask" responses (29%) and only 10% perceived a threatening face, suggesting the presence of a masked aggressiveness though not alarming.

**Table 21**

**Responses Perceived by Subjects on Card 19**

| | | | |
|---|---|---|---|
| Card 19 | Animal | Butterfly | 5 |
| | | Other animal | 7 |
| | | Animal's muzzle | 3 |
| | | Bird (s) | 8 |
| | | Mice | 3 |
| | | Other animals | 1 |
| | | Other | 3 |
| | Vegetable | Flower | 6 |
| | | Other | 2 |
| | Other | Nest | 3 |
| | | Mask | 2 |
| | | Other | 9 |

Atypical responses given by a few subjects has been placed under category "Others".

Animal perception in one form or other was the common response of the subjects. No one gave Anatomical or Human responses though many subjects see "hands". Avoiding the perception of body imagery may again bring back the theme of conscious avoidance of own body due to the problem of obesity.

**Table 22**

**Responses Perceived by Subjects on Card 20**

| | | | |
|---|---|---|---|
| Card 20 | Human | Threatening Face / monster | 12 |
| | | Bad eyes | 3 |
| | | Other | 1 |
| | Animal | Animal | 11 |
| | | Wolf / dog's muzzle | 3 |
| | Other | Mask | 7 |
| | | Other | 7 |

Atypical responses given by a few subjects has been placed under category "Others".

Twelve percent (12%) of the subjects rejected this Card. 54% gave a response related to "head": 29% perceived a "threatening face" or "monster" (7% saw "bad eyes") and

17% a “mask”. Though threatening is quite common on this card but persons with good ego strength are able to perceive a healthy imagery of human face.

The qualitative and quantitative analysis of the SIS-I Test responses suggest that the 66% of the subjects are preoccupied with thoughts of body problems, poor figure, bad shape etc. They have perceived “Mask” on Card 1(12%), Card 18 (29%) and Card 20(17%). The “ Mask” responses might be indicative of hiding her self or protecting her “ fat women” concept from others. This observation is further supported by the fact that 44% of the responses given on the Card 3 are “human gestalt” without movement or stylised. The spontaneous emotional manifestation is hampered by the tendency to mask the SELF because of the fear of any possible affective involvement. The responses given to Card 2 (40% of the human figures are “clown”, “cartoons” or “masked figures”) can further support the contention of poor body imagery associated with obesity.

**Heart Consciousness:**

A limited psycho physiological consciousness of the perception of heart may indicate affective inhibition.

**Gastrointestinal Consciousness:**

The fat women of the sample have shown low consciousness of the gastrointestinal organs, though there is increased oral sensibility. On card 10, majority of the responses were atypical.

**Spinal Column Consciousness:**

The spinal column consciousness is adequate. At a symbolic level it suggest the presence of fairly firm personal self.

**Sexuality:**

It comes out a tendency to reject the genitals and the reproductive organs associated to the presence of anxiety contents. However, at a symbolic level it points out a desire to have happy life as expressed by “flower” and “plant” contents. The topmost protrusion on card 17 that could have phallic connotations evokes in some fat women anxiety leading to rejection of this card.

**A Clinical Case:**

Mrs L. is 37 years old, weight: 117 kg, height: 162 cm, working as shop assistant / porters in a kindergarten and cohabiting since 9 years. She has a 6 years old son from the previous partner. Currently she is under diet therapy. When 36 years old, she underwent an operation of bending, without a positive result. It was advised to her “ because it is useful in a case if it has organic problems, concerning metabolism, but if there is psychological reason it may not work”.

She started gaining weight 10 kg per year since she was 9 years old. In 1997 she lost 30 kg after diet control and taking slimming pills. She returned to her initial weight after

she stopped pills. She worked in her parent's Bar - Ice cream shop from the age 17 to 28 years. She started looking for another job to be more independent and during this period she met with her present partner (40 years old). While talking about that bar she worked, she started crying and has some painful association, which she did not share.

Her father died six years ago. He was Sicilian with authoritative attitude. Her relationship with mother was ambivalent. She has always been jealous of her brothers: (the elder at present is a bank employee and the younger works in the bar with mother). She thinks that "They always come first and they were more important because they were male". She describes her partner as a "taciturn person, he never helps me in house work. He is an introvert person and doesn't go out of home without me".

In 1994, while she was pregnant, he was out of work. Her parents didn't help them, not even economically, because they had not accepted their daughter's partner since he had a son from his previous partner. She feels frustrated because she is unable to change the situation in her favor. My brothers are indifferent, my mother is cool, and my husband has very casual approach. My son is insecure and is afraid of everything".

The SIS-I was administered to her and the responses with their interpretation are given below:

Card 1: "An animated cartoon, like the face of a little mouse", needs no explanation. It's a good response.

Card 2: "A dancing character with the face like a heart" It is good response suggest her ego strength and desire to lead a happy life by way of dancing.

Card 3: "Plaits of hair; and Twins" Its a good response suggest her happy interpersonal life particularly with her partner.

Card 4: "An apple and a character with a big mouth (QE: a male for hairs): and Two snakes" The content analysis of the responses indicates her ability to integrate the female gestalt: "a person with a large, big mouth… with such a kind of hair". It seems a man. A dancing lady could have been the most typical response and avoiding to perceive a female figure in dancing pose may indicate her depressive mood and conflict with her own body imagery. However, projection of snakes may represent her conflict with male organ or dissatisfied erotic desires. This may further be associated with Mrs. L.'s difficulty in the identification of herself and her family life.

Card 5:"A big fur carpet: Dracula (a character that feed on human blood, sucked from the neck of his victim): and A scarecrow" Her anxiety is brought out on the surface and her fear is quite obvious.

Card 6: "Two birds kissing each other" is a good response suggesting her desire to have happy life?

Card 7: "The red part seems a heart and the black part seems a tongue of a monster, a

strange animal" Perception of heart is a good response but the monster represent her fear and anxiety. She needs therapy to reduce her fear and anxiety associated with body imagery.

Card 8: "A chest…with inside a heart" is a normal response.

Card 9: "Two kidneys…with the bladder and a male sexual organ, but I do not like it is done"

Perception of Kidney is Most Typical normal response but the male sexual organ depicts her conflicting relationship.

Card 10: "It could seem my stomach, very enormous and the Mouth" It may indicate gastric consciousness of the subject. This response shows her subjective perception, the way she lives her body rather than the structural reality of the inkblot.

Card. 11: "A face with eyes, nose, I don't see the mouth, it could be hidden among beard

Two opposite persons (F) and Two breasts of woman" It depicts her suspicious attitude and to some extent paranoid thoughts. However, two female and breast seems to be good response.

Card 12 : "I don't see anything in the red part. The white part stands out very well: it seems a male sexual organ, and a chandelier" Theme of dissatisfied relationship and phallic contents are brought back on this card. Chandelier is normal response.

Card 13: "Shape of heart, it looks sad, black!" Heart is a good response but it looks sad suggests her depressive mood.

Card 14: "The chelae of a scorpion, a cancer, and Female genitalia" Imagination of female sex organ is a healthy response but simultaneous perception of scorpion on this image may again suggest her conflicting sex life.

Card 15: "The vertebral column" is a good response.

Card 16: "Two strange head of animals that want to demonstrate who is stronger looked at each other and showed one's teeth". Theme of hostility and aggression is brought back and may suggest her difficult interpersonal relationship.

Card 17: "A vase with a cactus-plant and the male sex organ". It's a normal response on this image.

Card 18: "A mask (QE: monster of science fiction)". The mask she takes could by the symbolic equivalent of her "defence, protection" from the surrounding worrying world. Her own body allows her to put a physical and a psychological distance between Self and others.

Card 19: ""two winged insects on a flower with the head down and the legs in the air; or a big butterfly". It may suggest her feeling as being seduced and helpless to protect herself.

Card 20: " I see nothing…it looks as two cats wrangling with tail upwards". Suggest her aggression though in mild form.

The content analysis of the SIS-I responses points out her conflicting relationship with her partner, erotic dissatisfaction, aggressive attitude with hostility, suspicion in mild form and anxiety towards her own body imagery. This has been further revealed by her perception of "mask" on Card 18 and face on Card 1,2, 4 and 11.

The mask she perceives could by the symbolic equivalent of her "defence, protection" from the surrounding worrying world. Her own body allows her to put a physical and a psychological distance between Self and Others. At the same time, this defence could conceal a lack of auto esteem and a feeling of shame for her body shape that she perceived awkward and bulky. This aspect is confirmed by the high score in the EDI-2 sub-scale BD (Body Dissatisfaction). This aspect and the fear of being refused or mocked could explain her tendency to have superficial relationship with people. In fact, the score detained in EDI-2 sub-scale SI (Social insecurity) suggests her relationships in an insecure, deceiving way and as they are too much difficult to be maintained.

Oral contents are shown in many cards so her fatness can be considered a reaction and her hyperfagia (Iperfagia) is a compensating mechanism to the difficulties of living such as the need of love or the loneliness. It may further suggest a dependence need assuming the characteristics of "being received and understood", but at the same time a desire to have independence and autonomy. This desire of her, should have been supported and not blamed by her biological family. The response given on the Card 19 is particularly explicative: "two winged insects on a flower with the head down and the legs in the air; or a big butterfly".

The patient has psycho physiologic consciousness of the heart functions with depressing elements which are shown in Card 13: "A heart shape, but it is ugly, it seems so sad, it is dark!" Many heart responses in the protocol suggest her awareness with body and to some extent anxiety with body imagery.

Her worries about sexual function of the female genitals are brought out on Card 12 by avoiding to perceive the female reproductive organ, "I can't see anything in the red part!" though she has perceived very well the white part that looks like the male genitals". It can also be noticed that responses concerning the male genitals on Card 9 and 12 indicate the consciousness of the other body parts. On Card 17: "A vase with a cactus, the male sex" depicts sexuality, supports the hypothesis of the difficult relationship with the opposite sex.

**Conclusions:**

It may be concluded that the dissatisfaction of the Obeys subjects for their own body can be seen both by EDI-2 and the qualitative and quantitative analyses of responses of SIS-I test. As a matter of fact obese women of the present study find difficulties to integrate parts of their own body and particularly to assimilate female traits in a gestalt

form. It may be further brought out that the obese women perceive a disharmony between the experience of their real body and their ideal body. The low level of impulsiveness that is noticed on EDI-2 is supported by low affective interpersonal relationship indicated on SIS-I test and in the clinical interview. The particular case study in question indicates her body anxiety, aggressive attitude, sexual conflict and disturbed interpersonal relationship. It further validates the efficacy of Somatic Inkblot Series and its pulling power to bring out on the surface deep-rooted problems, needs therapeutic intervention.

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**For details please contact :**

Wilfred A. Cassell, M.D., FAPA, APC, FSIS, Director, Somatic Inkblot Center, President, Somatic Inkblot Society and Editor, SIS Journal of Projective Psychology & Mental Health, 4501E, 104th Avenue, Anchorage, AK 99516 (USA.)
Tel. : (907) 346-3450
E-Mail : drcassell@gci.net
Web Site at http: //www.somaticinkblots.com

OR

B. L. Dubey, Ph.D., DPM, FSIS,
Editor in Chief, SIS Jr. of Proj. Psy. & Mental Health,
Director Somatic Inkblot Center India,
P.O. Box 1107, Sector 15 Post Office, Chandgarh-160015 (India)
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E-Mail: sisdubey@hotmail.com OR sisdubey@rediffmail.com

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