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Editorial

REGISTRATION OF CLINICAL PSYCHOLOGISTS

—A profession under identity crisis

In continuation of editorial of the last issue (IJCP, Sept. 1987) which makes a special reference to the omission of the role of clinical psychologist in the recently enacted Mental Health Act 1987, present editorial is yet another attempt to bring to light the disturbed feeling of identity among the professional members and evolving an effective solution. It is really a matter of concern that in spite of tremendous growth of the subject and remarkably valuable services being provided by a large number of clinical psychologists working in various psychiatric institutions of the country the profession is somehow not being given due recognition and as such the time has come to take stock of the things as they exist. This editorial essentially deals with certain basic issues such as the purpose of establishing postgraduate courses in clinical psychology at the two institutes (NIMHANS, Bangalore ; CIP, Ranchi) and their continuance for more than three decades, the kind of special mental health services being rendered by these professionals and also their medico-legal responsibilities. As the functions of clinical psychologists have been discussed in several issues of IJCP, this editorial comprises relevant excerpts from past editorials and presidential addresses of IACP as a matter of reference to those who are not familiar with the long-felt need of registration of clinical psychologists in this country.

First of all, let us have a close scrutiny of the material given in the Handbook of All-India Institute of Mental Health (now NIMHANS) which provides relevant information about the important roles and functions of clinical psychologists as envisaged by the Government of India thirty-three years ago at the time of commencing these training courses. An attempt would also be made to incorporate opinions and suggestions of the senior fellows/members of the association with special reference to registration of clinical psychologists.

The above Handbook introduces the training course in Clinical Psychology as under :

"The Diploma Course in Medical Psychology was started by the Government of India in 1955 with a view to cater to the increasingly greater need for specialists in Mental Health in India. This course—the only one of its kind in Applied Psychology in India—extends over two years and includes a wide range of subjects with emphasis on practical and clinical problems. Wherever problems of adjustment and evaluation of human behaviour are attempted to, the special abilities of the Clinical Psychologists should be utilised. As such, in more advanced countries, Clinical Psychologists are employed in Nursery Schools, Child Guidance Centres, Courts and Penal institutions, Hospitals, Homes for Mental Defectives, Educational Institutions and Schools for Sensory Defectives (blind and deaf) etc."

The handbook also provides a detailed account of the functions of a Clinical Psychologist in various areas. Reference is however made here to only some of the statements which have direct relevance to mental health programmes :

1. **Child Guidance Clinics :** *"It is very essential to employ clinical psychologists in Child Guidance Clinics which are now being opened in different parts of the country because he is specially trained to deal with the emotional and personality problems of the child."*

2. Mental Hospitals : In most of the mental hospitals in India, the overburdened psychiatrist who has to look after the medical and the administrative aspects is not in a position to make a thorough mental examination of every patient. The Clinical Psychologist trained in this Institute is competent to undertake complete psychological and sociological investigations and also individual and group psycho-therapy in most of the cases in co-operation with his medical colleagues."

3. Community Development Projects : "The rural population in India is at present completely deprived of the benefits of Mental Health Services which are all concentrated in cities. It is necessary to open immediately mental health centres along with community development projects in various parts of the country. In each centre a whole time Clinical Psychologist and a visiting Psychiatrist should be appointed."

N. N. Sen, Founder—President of IACP, in his editorial (IJCP, 1975) greatly emphasized upon the role of clinical psychologists as a therapist: "The emergence of behaviour therapy and therapies based on different learning models constitute a major breakthrough in the field of Behavioural Sciences. Within the last decade Behaviour Therapy and Behaviour Modification techniques have established their effectiveness in catering to a very wide area of human behaviour. . . . What remained confined to the laboratory, began to be applied in natural environment with spectacular success. . . . Therapy should be the central concern of clinical psychologists in years ahead."

In his editorial entitled "A profession in search of its image", D. P. Sen Mazumdar (1976) elaborately discussed the professional problems and emphasized upon the need of necessary legislation in the shape of licensing :

"There have been frequent grumbles about the status of clinical psychologists. . . . They feel that they are being treated not at par with the medical colleagues so far rights, privileges, and responsibilities are concerned. . . . It is time that we take it up with health administrators and particularly those who make policy decisions. A psychiatrist, psychologist or social worker can be an Executive Director of large Community Mental Health Centres in the U. S. and hence there is no reason why senior, suitable and competent men from the rank of clinical psychologists should not work at the highest level of mental-health administration. After all a pragmatic, resourceful nation the U. S. must have learnt from its own experience before the gates were opened to the psychologists and social workers. Of course progressive thinking comes slowly and slower still in the implementation in a conservative country like India. . . . Public awareness and recognition will also come if clinical psychologists on their own can function independently by which they will have direct contact with the community. . . . The association will have to work towards providing some legal security in the shape of 'licensing' and make serious effort about necessary legislation".

With regard to registration, G. G. Prabhu, presently Professor & Head of the Deptt. of Clinical Psychology, National Institute of Mental Health & Neurosciences, Bangalore, makes the following observations in his editorial (IJCP 1977) :

"At present there are no legally required qualifications for one to function as a clinical psychologist, there is no official register of clinical psychologists, nor there is any legal licence to practise the profession. It is necessary that some form of regulation is brought about over the professional practice of clinical psychology. This would ensure that only qualified people would function as professional workers. Simultaneously it would have a salutary effect as this would safeguard the public from being exploited by quacks as well by under and unqualified people. . . . Control over such regulatory functions belongs to the government. It is time that the necessary legislation is carried out both at the central and the state levels. A certification law is urgently called for. This should lay down the standards required by people before they can use the title 'Clinical Psychologist'. A licensure law is also called for which should define the practice of clinical psychology by specifying the ser-

vices the certified clinical psychologist is qualified to offer the public. The USA started having such regulatory legislation right from the mid-forties and at present such statutory regulation of psychological practice exists in the whole country. At present this is a universal trend. In 1968, for example, Italy brought about a special law defining the functions of the clinical psychologists. As an alternative to the foregoing, the minimum that is required is the establishment of the non-statutory certifying boards under the aegis of the professional body of the clinical psychologists."

"The certification and the licensure law would encourage the independent practice of clinical psychology. This would halt the brain-drain and succeed in retaining in the country the man-power so much in short supply. A legislation to regulate the practice of clinical psychology is in public as well as national interest and is long overdue."

Vinoda N. Murthy (1982), in her IACP presidential address entitled "New directions in clinical psychology" laid special emphasis upon board certification/registration and also highlighted the professional responsibilities of clinical psychologists in relation to crime and law :

"For a long time it is the psychiatrist who was called upon to give expert witness in court room. Recent developments in the field of law, jurisprudence, criminology and forensic medicine, have recognised the contributions of clinical psychology in these areas and as a result now, a clinical psychologist is called upon to give expert witness either in civil suits involving a dispute over private rights or in criminal cases involving a public offence or other crime situations. The clinical psychologist is required to give his opinions about the accountability of an accused at the time of crime, fixing of the criminal responsibility...."

"If clinical psychology has to make its mark in the new directions, there is an immediate necessity to provide him (clinical psychologist) with legal security in terms of his registration, licensing and Board certification. The IACP has to take up this task most urgently".

In much agreement to the above, H. K. Paintal in her IACP presidential address of 1986 brings to light the professional problems currently faced by these professionals :

"There is a general feeling among clinical psychologists that their skills, knowledge and training can be utilised more fruitfully than it is being done. They have a feeling that due to narrow and parochial interests, the role of clinical psychologists is undermined by those holding positions of power, authority or are associated with policy-making. For example, a close study of the document on the Indian National Mental Health Programme (1982) shows a complete obliteration of clinical psychologist as a profession. Nowhere in this document where legitimately this profession should have been specifically mentioned, has been mentioned".

As regards the recently enacted Mental Health Act, majority of psychiatrists seem to be much dissatisfied. A.K. Agarwal, Professor of Psychiatry, in a recent editorial (IJCP 1987) puts his views quite candidly :

"The hopes and aspirations of mental health fraternity have been shattered by the Mental Health Bill 1986. During the last fifty years tremendous advances have taken place in the care of the mentally ill and various methods of pharmacotherapy and psychotherapy have nearly revolutionised the care of emotionally disturbed persons. Current trend is to treat the patient in the community as early as possible to prevent deleterious effects of hospitalisation. Needless to say, treatment of mentally ill is a team effort which involves psychiatrist, clinical psychologist, social workers and psychiatric nurses. This bill, however, does not identify or recognize most of these personnel."

He further makes a very critical observation about this Bill (now Act) :

"There are more than twenty million mentally ill in this country who need immediate psychiatric help. Taking into account the strength of available trained personnel and hospital facilities in India, there will never be sufficient number of psychiatrists or hospital beds to cater to these forgotten

millions. Hope lies only in a multidisciplinary approach at community level where some sort of meaningful help could be provided to these people rather than hampering their treatment by making necessary legal impediments in seeking therapeutic help. The net effect of the bill will be to produce delays because the already overworked judiciary would never be able to cope with millions of people who require psychiatric help."

Further, in a recently organised UGC Workshop on Ethics in Psychiatry (1987) at K. G.'s Medical College, Lucknow, there was a scientific session on Mental Health Act 1987 in which a number of senior psychiatrists and other experts highlighted the serious inadequacies and problems in the implementation of this Act (proceedings under publication). Presenting a paper in this session, J. K. Trivedi, an expert in Forensic Psychiatry, states that the Act is grossly unsuitable and greatly emphasises upon the valuable services of clinical psychologists :

"Current trend is to treat the patient in the community as early as possible and prevent the deleterious effects of hospitalisation. National Mental Health Programme also points in the same direction and encourages the participation of clinical psychologists, social workers and other paramedical personnel in the care of emotionally disturbed individuals. This Act does not recognize any of these personnel who are otherwise so important for mental health.... It is unfortunate that the new Act is only progressive in dropping terms like 'lunacy', 'insanity', 'unsound mind' and 'idiot'. The body and soul are the same in a new garb."

The facts and views contained in the preceding paragraphs clearly demonstrate an urgent need of registration of those clinical psychologists who possess requisite qualification. Any further neglect towards it is likely to jeopardise the prospects of the profession. As a matter of fact it should have been taken up at the top priority much earlier and had it been so these professionals would have been in a far better position today. The profession is passing through a critical stage and identity crisis is bound to deepen unless we put our full efforts to make licensing /registration a reality.

It is rather intriguing to see so much delay in this task. A sub-committee of IACP should frame rules and regulations of registration and also look into its legal aspects. There should not be many legal impediments in implementing it since the practice of clinical psychology does not involve prescription of drugs nor any other physical method of treatment which may have side-effects and is confined to psychometric evaluation, counseling, psychotherapy and behaviour therapy in which these psychologists possess a comprehensive clinical training. Undoubtedly, clinical psychologists have to follow a definite code of conduct and this would not be possible unless their registration is done. It is dismaying why there should be any fuss over this issue while there is a provision of registration for so many professional groups including nurses, midwives, naturopaths and physiotherapists. The need of registration is being increasingly felt on account of growing infiltration of the unqualified and underqualified clinical psychologists and a formal registration would put a curb on the unhealthy practice.

In spite of much public demand especially from large industrial organizations, schools and colleges and nursing homes, there are only a handful clinical psychologists who are engaged in private or independent practice, the reason being non-availability of legal safeguards. In a country which has more than twenty million mentally ill people and majority of them suffering from emotional problems, psychological methods of treatment like counseling, psychotherapy and a variety of behaviour therapy techniques should be greatly helpful. But, in the absence of any registration procedure even a highly qualified clinical psychologist with good public recognition feels rather insecure in providing

his therapeutic help. The net result is that the needy patients remain unattended for years together until their problems become seriously aggravated or chronic. They also fail to consult a psychiatrist since there is so much social stigma attached to visiting a mental hospital or psychiatric centre. Even those who can afford private consultation do so in a rather discreet manner. Needless to say, there is no stigma attached to consulting a clinical psychologist because the majority of individuals who seek his help present with mild to moderate emotional problems such as anxiety, fears or phobias, compulsions, obsessions, poor emotional controls, depressed mood, suicidal ideation, impaired mental functioning, family or adjustment problem. That is why, one should ideally refrain from labelling them as patients because even the so-called normals may have some of these problems. Are we not contributing to mental ill-health by denying these individuals proper psychological help/guidance when they need it most?

At a time when drug addiction, anti-social activities and other behavioural problems of the younger generation are being witnessed in an epidemic proportion and a comprehensive National Mental Health Programme being launched in the whole country, there should have been a greater involvement of these professionals in meeting the mental health needs of the people. Can we deny the fact that hardly one percent of the patients seeking psychiatric help are given psychotherapy or behaviour therapy? A huge amount is spent by the government on the clinical training of these psychologists in the hope that they would serve the emotionally disturbed individuals with their long-earned expertise of psychological methods of treatment. Unfortunately, the state of affairs is such that the public has little awareness of these professionals and barring some enlightened individuals, only a few can differentiate between a clinical psychologist and a psychiatrist. The fault lies in the system of dispensation of therapeutic services. The professional identity of these experts is bound to remain shrouded unless they get due opportunity of providing care and treatment.

In the developed countries situation is considerably different. Patients as well as their family members are very much aware of the side-effects of the psychotropic drugs and as such they prefer to consult a clinical psychologist unless the problem is remarkably serious requiring physical method of treatment. But the things are so depressing in India that in the whole text of Mental Health Act one does not find even mention of the word clinical psychologist and in this Act there is so much involvement of judiciary and other non-medical functionaries that even a psychiatrist finds himself out of place. No wonder people seeking psychiatric help may become frightened with its jail like rules and regulations and consequently social stigma to psychiatry may further become deeply accentuated. Do we need any further proof to demonstrate this Act being a definitely retrograde step? Is this the way our government is going to achieve the objective of 'Health for all by 2000'?

In view of the above-mentioned facts, there is obviously, an urgent need of registration of clinical psychologists and it should be immediately taken up by the Indian Association of Clinical Psychologists, the only recognized professional body in the country. Moreover, since it is the duty of the government to protect the rights and privileges of every professional group and provide due opportunity for its growth, the government should take an effective step in this direction.

Further, the Mental Health Act—1987 requires serious thinking as it is likely to affect common man. There is an urgent need of dispassionate discussion by various sections of the society and perhaps this responsibility can be best discharged by the mass-media. Since the Act is going to be soon implemented, it calls for immediate attention.

S. C. GUPTA

MEASUREMENT OF POSITIVE MENTAL HEALTH, SOME THEORETICAL AND PRACTICAL CONSIDERATIONS¹

S. K. VERMA²

ABSTRACT

Measurement of positive mental health is beset with many problems, some theoretical, others, of practical nature. Not only is this a highly abstract and elusive concept, it is also very broad and difficult to measure in its totality. Various aspects of it however can be operationally defined and measured. In the present article, an attempt is made to highlight some of the important theoretical and practical problems that need considerations. Suggestions are also made in the light of available literature on the subject for the future researches in this area.

Mental health is aptly defined as the full and harmonious functioning of the total personality, realizing one's full potential in the world of work, with satisfaction and contentment to oneself and benefit to the society. It is a broad concept and involves many debatable theoretical issues. It is customary to talk of the dual factor theory of mental health—the negative mental health (freedom from mental disorders) and the positive mental health (factors directly contributing to mental health). For obvious reasons, the negative mental health has to be attended to first as it is more distressing and disabling.

Recently there has been a growing concern about the long neglected positive aspects of mental health. After all, it is argued, absence of mental ill health is not the same as having good mental health. One should think positively, act positively and be always optimistic—all good things of life are attained only this way and the same holds good for mental health also.

What is positive mental health ?

It is one thing to talk about positive mental health and quite another to define it in operational terms or to measure it.

It means so many things to so many people. It is much easier to recognize it in persons around us through its manifestations only and that too to a limited extent. Perhaps only Saints possess it adequately to be identifiable as such. Yet they are also often described to possess certain, not so uncommon, human weaknesses like anger, jealousy, fear, despair, depression and what not. In spite of all this however, positive mental health still remains a desired and desirable quality.

Who is mentally healthy ?

A mentally healthy person is expected to be a well adjusted one, living in harmony within as well as without. He is expected to be quiet, happy, at ease with everyone and in all spheres of life (home, work, society self as a person). The two concepts positive mental health and well-adjusted have much in common but the two are not identical and certainly not interchangeable. One may be at odds with the society at large and still be at peace with himself and mentally healthy. On the other hand, one may be at peace with the world and apparently well adjusted/successful by ordinary standards in all spheres and yet may not be a self-actualized person as his

¹ Invited article

² Associate Professor, Department of Psychiatry, Postgraduate Institute of Medical Education and Research, Chandigarh-160012.

real potentials are concerned. It is not essential that one may be fully adjusted in all spheres to be mentally healthy—a "reasonably well adjusted" should be good enough for most but not all mentally healthy individuals can claim to be that.

Similarly a mentally healthy person is expected to be productive, constructive and a useful member of the society at large. But a highly successful business magnate, who may have built an industrial empire to rule, can still be unhappy, dissatisfied and disillusioned with life in general and with himself as well. He may still not know what, after all, he is looking for, or really wants to achieve and where and how he could achieve his goal.

A mentally healthy person is expected to be happy, contented, satisfied and with a high sense of subjective well being, enjoying every bit of his life—drinking the cup of life to the full as it is said. But all such persons with those much sought after desirable traits may not be mentally healthy. A deluded psychotic may also think that he has all of them and feel on top of the world if allowed to do so.

Relative calmness in the face of crises of life, stress endurance and frustration tolerance are all desirable attributes of a mentally healthy individuals, but that has to be differentiated from the seeing unconcern of a withdrawn schizophrenic patient, or, unresponsiveness of a stuporose depressed patient or, of the unawareness of danger in a mentally retarded individual.

A mentally healthy person may be striving for knowledge but all knowledgeable persons may not necessarily be mentally healthy. An individual may be observed with the idea that peace in the world is achievable through an atomic bomb or through a star war programme. Possession of all these scientific knowledge about deadly weapons may not be enough to make one feel secure and mentally healthy.

Quality of life is one concept said to differentiate a healthy individual from others. It is the relative excellence achieved by the person in life that again is characterized by a number of related terms like satisfaction, well being, adjustment, stress tolerance, sense of belongingness, etc. It is an illusive concept difficult to measure in its totality.

A mentally healthy person is not to be conceptualized as a mere consumer of healthy services provided in the community, but the one who also contributes to it and is perceived as a producer of health and providing emotional/social support to others. He enjoys this process of give and take, the interdependent mutually supportive roles. He makes creative use of leisure time and has no regrets whatsoever even for failures if occurred inspite of his best possible efforts. A mentally healthy individual is capable of making the best of the existing circumstances, however adverse they may be. He is flexible, adaptable, loving and lovable person. It is possible to have good positive mental health, irrespective of ones position with regard to negative mental health. For example, even a mentally retarded children by his innocent smile can give a sense of happiness/usefulness in a short period which could be a joy forever. Only in this, there lies a ray of hope even for the persons with physical and mental disorders/disabilities/dysfunctions. Granted that there is no virtue in just having these handicaps, but there is a virtue in being able to rise above them, in helping others to overcome their disabilities and to realize one's own potentials inspite of these limitations.

The dual-factor theory of mental health

The dual factor theory postulates that there are different sets of factors that contribute to negative and positive mental health. Some factors when present only contribute to negative mental health but

Low child abuse

- " death rate
- " birth rate
- " morbidity of physical and mental illnesses
- " Crime rates
- " Unemployment
- " strike rates/lockouts
- " riots and prejudices
- " Consumption of alcohol, addictive drugs, tranquilizers.
- " absenteeism from work
- " divorce rate dowry and
- " suicide rate

and High literacy rate

- " growth rate
- " facilities for welfare of children, women, sick, disabled, old etc.
- " Sense of social security.
- " Cultural (art, drama, music etc.) activities.
- " production
- " nutritional status
- " number of voluntary associations, self help groups etc. related to mental health activities.

Measurement of positive mental health :

It is rightly said that if anything exists, it exists in some quantity if it exists in some quantity, it can be measured and if it is not measurable at the moment, attempt should be made to make it measurable. It goes without saying that the same holds good for positive mental health also.

Measurement refers to attributing numerals according to some principle(s). It is difficult to have a global score for positive mental health, but a number of attempts have been made to measure some of its aspects though they are overlapping and to that extent interdependent, e.g. Subjective Well Being (Bryant and Veroff, 1982 ; Nagpal and Sell, 1985 ; Sharma 1987), General Well Being (Verma et al, 1983; Moudgil et al., 1986; Verma and Pershad, 1984), Quality of Life (Verma, 1986 ; Sharma, 1985 ; Flanagan, 1982 ; Campbell et al., 1976; Kalra and Ghosh, 1984; SEARO, 1984, 86) Adjustment (Veroff et al., 1962). Social interaction (Henderson et al., 1980, 1981) Satisfaction (Neugarten et al., 1961 ; Herzberg, 1966 ; Herzog and Rodgers, 1981) and Happiness (Singh, 1983; Verma, 1981, 1986 ; Verma and Pershad, 1984; George, 1979). Information about these and several others can be had from the various test manuals,

and handbooks of social and psychological instruments and from the enclosed selected bibliography.

An attempt to put a global view of positive and negative mental health is presented in the chart (preceding page) with suggested factors for most of which reliable tools are available or could be prepared. Perhaps a factor analytic study measuring all these aspects can help reduce them further to a set of fewer variables as well as suggest whether a final global score is feasible for the two types of mental health variables (negative and positive) or, it would be better to use a profile only as suggested herein. The author personally feels that the latter would be a more meaningful approach.

The profile analysis can lead one to further regrouping the individuals into four quadrangles with some having both high assets and high liabilities (i.e. higher scores for positive and negative mental health factors or, AL group); some having both low assets and low liabilities (or, a I group), some having high assets but low liabilities (or A I group) ; and some persons having low assets and high liabilities (or a L group). These two, together may help in counseling the patients/subjects

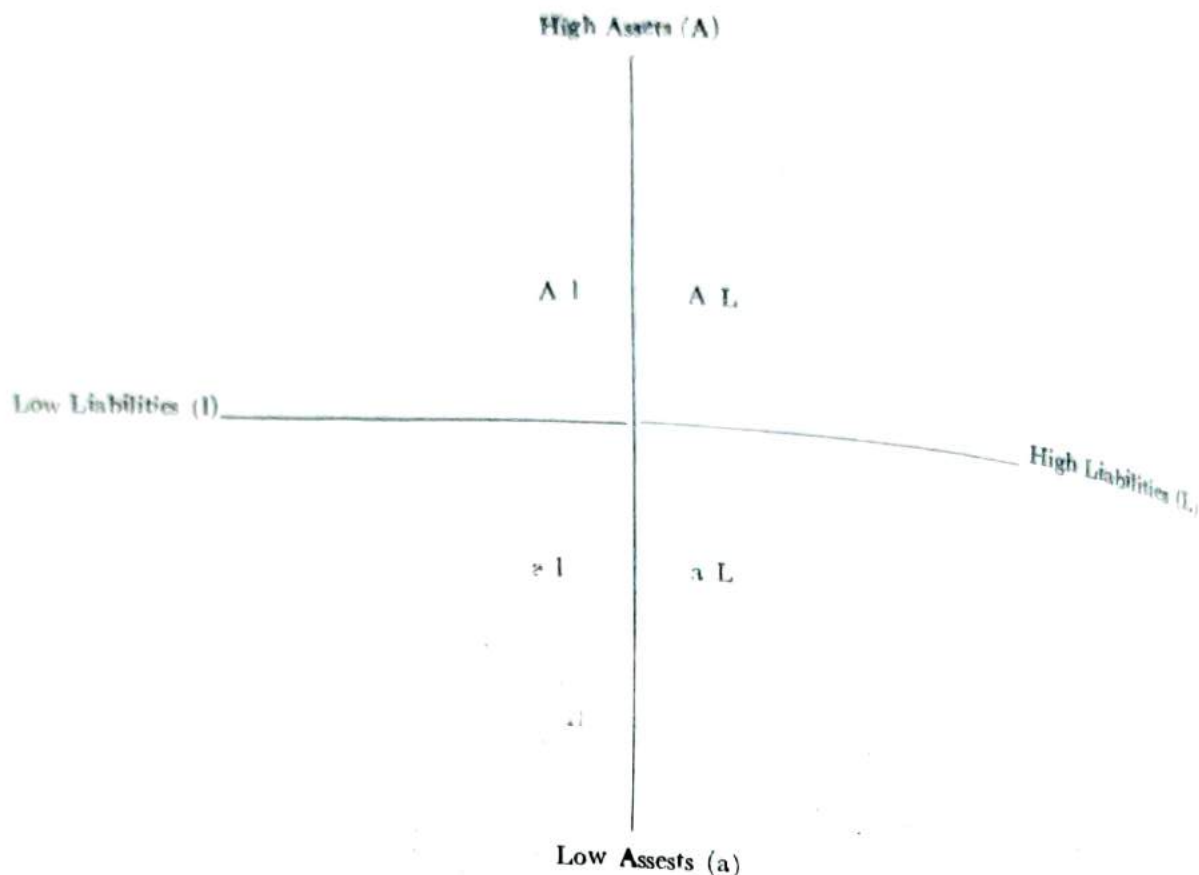


Figure 2 : Four groups in terms of Assets and liabilities

and their families, in selecting the targets for psychotherapeutic and other interventions and in the evaluation of these interventions.

Philosophy is said to be the mother of all sciences. A philosophical approach or, an idealistic definition of mental health could be described as a general and enduring state of unending joy and happiness about oneself and of others, a feeling of satisfaction and contentment and of oneness with the universe that could cause even a patient with terminal illness to smilingly console the doctor about his concern and efforts not having been wasted even if the life is not prolonged, the quality of life is definitely enriched.

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DEPRESSION, SEPARATION AND DEPRIVATION IN BORDERLINE PERSONALITY DISORDER

J. A. BEATSON¹

AND

H. D. CHOPRA²

ABSTRACT

This study examines the depressive symptoms in a group of 12 inpatients with narrowly defined borderline personality disorder. The course of depressive symptoms on and during admission, the precipitants of admission and the recollections of childhood experiences in these 12 patients are reported and discussed.

Depressive symptoms were present in all cases at the time of admission, but were usually transient. Threat of separation, actual separation or loss experiences were regarded as precipitants of admission in all cases. Emotional deprivation in childhood occurred in eleven cases, with hostility from at least one parent in six. Separation from father by death, separation or divorce occurred in the childhood of five patients.

The prevalence of depressive symptoms in the presentation of patients with Borderline Personality Disorder has been noted many times since first reported by Grinker in 1968. The different quality of the depressive experience in borderline patients has been stressed with complaints of loneliness, emptiness and boredom predominating over the usual depressive guilt and remorse. Kernberg (1967) emphasizes the inner sense of badness, deprivation and rage which seem to be distinctive components of depression in borderline patients. Conte et al (1980) reported that borderline patients feel let down by people close to them, and view themselves as failures.

When depressive disorder (to be distinguished from depressive symptoms not achieving "casesness",) co-exists with borderline personality disorder, the signs and symptoms of depression are usually those of unipolar non-melancholic depression (Akiskal, 1981, Charney et al, 1981). Impulse action patterns and quality of interpersonal relationships have been found to distinguish borderline patients with depression from the non-borderline

depressed group (Kroll et al, 1981; Gunderson and Kolb, 1978).

Several recent studies (Gunderson et al, 1981; Walsh, 1977; Frank and Paris, 1981) suggest that emotional deprivation of neglect is prominent in the childhood histories of borderline patients.

Deprivation of love in childhood has been considered to predispose to depression in adulthood since the writings of Freud (1950) and later Bowlby (1969) and Bibring (1953). It is possible that emotional deprivation in childhood is one environmental factor predisposing to both borderline disorder and depression.

There is little research on the effects of separation experience in borderline patients although many authors (Masterson, 1972; Walsh, 1977) consider that borderline patients have been sensitized to such events. The incidence of actual separation experiences in the childhood of these patients is another little examined but highly relevant area.

Soloff and Millward (1983) showed that a pathological sensitivity to separation experiences is twice as common among

¹ Psychiatrist
² Consultant Psychiatrist

} Footscray Psychiatric Hospital, 160 Gordon St., Footscray, Victoria 3011 (Australia)

borderline depressed as among non-borderline depressed patients. In the largest study to date, these authors compared the developmental histories of 45 borderline, 32 depressed and 45 schizophrenic patients, and found that borderline patients experienced more early life parental loss and had greater difficulty with normal developmental separations. 46.7% of their borderline group had suffered loss of father by death or divorce in childhood, as compared with 15.6 % of their depressed and 19% of their schizophrenic group.

The authors postulate that if borderline patients are sensitive to separation experiences, such experiences may lead to an exacerbation of symptoms and hospital admission. This pilot study set out to examine the depressive symptoms in a group of 12 inpatients with narrowly defined borderline personality disorder. The precipitants of admission and the recollections of childhood experience in these 12 patients are reported and discussed.

METHOD

This study is based on the observation of 12 inpatients (10 females, age range 21-31 ; 2 males, aged 18 and 22) with Borderline Personality Disorder, admitted to Footscary Psychiatric Hospital, Melbourne, Victoria, during the period June 1982-December 1984. In 6 cases this was the patients' first admission to any psychiatric facility, in 4 cases it was the second and the remaining 2 cases had 3 and 4 previous admissions.

All inpatients who fulfilled the DSM III criteria for Borderline Personality Disorder during this period were included in the study. Any doubtful cases, where there was a possibility of concomitant schizophrenia, affective disorder, organic mental disorder or substance abuse disorder, as per DSM III criteria were excluded.

Footscary Psychiatric Hospital is a

56 bed acute psychiatric unit in the western suburbs of Melbourne, Victoria, serving a population of 427,000, predominantly of lower socio-economic group. Only severely ill or disturbed patients are admitted because of shortage of beds.

The Diagnostic Interview for Borderline (Gunderson et al, 1981) was administered to all these patients shortly after admission by a trainee psychiatrist. All cases were examined by one of the authors to confirm the diagnosis and main clinical findings.

Depressive symptoms were elicited and categorized according to the 'affect' subsection of the Diagnostic Interview for Borderlines. The course of depressive symptoms during admission was monitored by a trainee psychiatrist under the supervision of one of the authors. The details of follow-up were obtained by examination of the case notes at the end of 1985 by the first author.

The precipitants of admission were determined by retrospective examination of the case notes by the first author and the distressful events leading to admission were counted as precipitants. Details of childhood history were also obtained by retrospective examination of the case notes.

RESULTS

Depressive symptoms in Borderline Personality Disorder

All cases were definite cases of borderline personality disorder as per the assessment of Diagnostic Interview for Borderlines. The scaled score range in this group was 8-10 (score greater than 7 regarded as a definite case). Table 1 shows the frequency and severity of depressive symptoms in these 12 cases as elicited in the Diagnostic Interview for Borderlines. The score range for individual items is 0-2.

The main findings are as follows :

Table-1. Depressive Symptoms in Borderline Personality Disorder

SYMPTOMS	CASE NUMBER											
	1	2	3	4	5	6	7	8	9	10	11	12
Depression in last 3 months	2	2	2	2	2	2	2	2	2	2	2	2
Weight Change (unspecified)	1	2	1	1	2	2	2	0	2	0	2	1
Sleep problems	1	2	2	1	2	2	2	2	1	2	1	1
Early morning waking	0	2	2	1	2	2	0	0	1	1	0	0
Felt better evening	0	2	0	0	0	0	1	0	0	0	0	0
Brooded over death	1	2	2	0	2	2	2	2	2	2	0	0
Felt life not worth living	1	2	2	0	2	2	2	1	2	2	2	1
Less Interest	1	2	2	1	2	2	2	1	1	2	0	1
What caused the dep'n ?												
—loneliness	1	2	0	1	2	2	0	2	1	2	1	0
—loss	0	0	0	0	0	2	2	0	1	2	0	1
—guilt	1	0	0	0	0	2	2	0	1	0	0	1
inadequacy/Failure	2	2	2	0	2	2	2	0	1	2	2	2
Periods of dep'n in past	1	2	2	1	2	0	2	0	2	2	2	2
Chronic feelings of Disphoria, Anhedonia Emptiness or Loneliness	1	2	2	1	2	2	2	1	2	2	2	2
Anger/Hostility last 3 months	2	2	2	2	2	2	2	2	2	2	2	2
Patient to be flat or have been elated	0	0	0	0	0	0	0	0	0	0	0	0
Patient is demanding or entitled	2	0	2	2	0	2	1	0	2	2	2	2
DIB Scale Score TOTAL	8	10	9	8	10	9	8	9	10	10	10	9
DIB Scale Score AFFECT	2	2	2	2	2	2	2	2	2	2	2	2

Scores

2 = much of the time

1 = some of the time

0 = not significant

All the cases reported depression for much of the time in the past 3 months.

Sleep problems were reported by all twelve patients over the previous three months, and in six of these early morning waking was reported. Chronic feeling of emptiness and loneliness were reported by all twelve patients, in nine of them for much of the time. Anger and hostility in the past three months was reported by all twelve patients, in all of them for much of the time.

Course of Depressive Symptoms during Admission and at Follow-up

The length of admission varied for 1 day-52 days with a mean of 18 days. In 10 of the 12 cases, depressive symptoms remitted fairly quickly (within 14 days) after admission in response to supportive management, and environmental manipulation. The fairly frequent fluctuations in the mood state of this group occurred in response to the state of relations with significant others at the time. Indeed, as has often been observed, the transience of mood in this group was remarkable.

In two (5 and 10), antidepressants were initiated during the course of admission (day 15 and day 7 respectively) because of the persistence of depressive systems. In both cases the depressed mood appeared less reactive to environmental stimuli.

Ten of the twelve cases were followed up for a period varying from 12-42 months. In 9 of the 10 followed up patients, depressive symptoms recurred, and in 3 of these (cases 5, 8, and 12) a diagnosis of unipolar non-melancholic depression was made at some time during the follow-up period.

In the six patients in whom depressive symptoms only have recurred, it was in response to an environmental stressor. There has been no sustained period of depression in this group.

In three cases where a diagnosis of

unipolar non-melancholic depression was made during the follow-up period, antidepressants were prescribed in therapeutic doses. In case 5, Amitriptyline up to 200 mgm per day over a 5 week period produced no improvement. No other antidepressant was prescribed at that time, as it became clear that the patient's mood state depended on environmental circumstances, particularly her relations with others. When the clinician was able to provide structure and support, and hostile and rejecting responses from others were minimized, this patient's symptoms improved. In case 8, no clear drug response occurred, and the medication was ceased after two months. In case 12, the depression improved spontaneously in response to improvement in current situation before the antidepressant would be expected to have effect (i.e. within one week of institution of medication).

Precipitants of Admission

Table 2 shows the precipitants of admission, the family history where known, and the childhood history as recorded in the case notes.

The main findings in the area were as follows :

In eleven of the twelve cases, admission with prominent depressive symptoms followed the experience of separation, threat of separation, or death of a close family member (spouse or parent) in the recent past. In three cases threat of separation from marital partner, or lover, and in three cases actual separation from husband or lover, preceded admission usually by a few days or weeks. In three cases death of spouse or parent, weeks or months earlier, was seen as the major event leading to admission.

Childhood History

In five cases, (1, 2, 10, 11, 12) loss of father by death or separation had occurred

at an early age (less than 10). In two cases (cases 2 and 11) where the father died when the patient was 10 and 7 respectively, years of separation from father preceded his death, because the child was fostered out (case 11) or father in gaol (case 2).

In three cases (1, 10 and 12) the father abandoned the family, at an early age (patient aged 2, 7 and 3 respectively). In two other cases (3 and 9) the father was alleged to have beaten and sexually harassed his female child over several years.

Three of the twelve patients (cases 4, 10, 11) spent much of their childhood living with relatives or in foster homes. Only six patients came from intact families.

In all eleven cases where details are available, childhood was recalled as unhappily and the parents described as rejecting, distant and, in six cases, hostile. When a step-parent (in all instances a stepfather) appeared on the scene, they were recalled in adverse terms, either as hostile or sexually aggressive to the patient (cases 1, 2, 10, 12). In six patients (case 1, 2, 4, 6, 7, 9) a parent or sibling was alcoholic or abused drugs. In three cases (1, 4, 7) two close family members (parent and sibling or both parents) were alcoholic.

DISCUSSION

The quality and prevalence of depressive symptoms in this group of twelve borderline patients is consistent with findings reported by several authors (Grinker et al, 1968; Kernberg, 1967; Conte et al., 1980). The fluctuation in the level of depressive symptoms according to the current state of object relationship was striking.

Sensitivity to separation, threat of separation or loss in this group of patients was notable, with one or other of these factors precipitating admission in eleven of the twelve cases.

Walsh (1977), in a review of fourteen cases added to Grinker's (1968) original

group, found that thirteen out of the fourteen patients had onset of major symptoms within 12 months of attempted separation from families. Soloff and Millward (1983) found greater sensitivity to developmental separations in their group of 45 borderline patients when compared to control groups of depressed and schizophrenic patients.

The findings in this study concerning childhood experiences of borderline patients are consistent with other studies (Walsh, 1977; Soloff and Millward, 1983) showing that the families of borderline patients are characterized by a high level of parental loss (in our cases always of the father) by death, separation or divorce. Conflicted marital relationships where the parental marriage remained intact, or conflict in the re-married family, are also characteristic. The borderline patients perceived neglect, and in many cases, hostility, from one or both parents. The protective smothering mother described in some borderline families (Grinker et al, 1968; Soloff and Millward, 1983) was not reported by any patient in this group. It could be argued that the history of childhood experiences and relationships given by borderline patients may be distorted by hostile projections. The patient's depressive view of the world at the time of admission may also have contributed to the blackness of the recollections. Only prospective studies beginning in early childhood, with objective evaluation of life-events, family rearing practices and family relationships could answer these arguments.

We are left with the question of what combination of factors leads to depressive symptoms or depressive disorder and borderline personality disorder. There is much to suggest that emotional deprivation in childhood is a factor common to both disorders. The question of the effect of separation in the form of parental death, separation, or divorce, is no doubt to be answered.

Table II. Precipitants of Admission, Family History and Childhood History

Case	Precipitant Admission	Family History	Childhood History
Case 1-male, aged 23, single	Threat separation from girl-friend in past 7 days	Father alcoholic Sister alcoholic	Parents separated when patient aged 2. Physically abused by stepfather from early age.
Case 2-male, aged 21, single	Breakup homosexual relationship in past 7 days	Father-antisocial personality disorder	Parents described as rejecting, emotionally remote. Father absent from family, died when patient aged 10. Mother remarried violent alcoholic.
Case 3-female, aged 26 married, one child	Separation from husband three months earlier	Mother obsessional personality disorder. Depression treated	Parents described as rejecting, emotionally remote. Prominent maternal rejection. Physical abuse by father and older brother over many years.
Case 4-female, aged 28 defacto relationship, one	Separation from defacto and child in past 4 weeks	Father alcoholic Brother-binge drinker	Patient lived mostly with an uncle until aged 13. Gross conflict between parents and frequent marital separations occurred.
Case 5-female, aged 27 defacto relationship	Stillbirth 2nd child twelve months earlier.	Nil known	Parents perceived as hostile and rejecting. Said to have disowned patient years earlier.
Case 6-female, aged 28, unmarried, no children	Death husband by drug overdose 3 weeks earlier	Sister chronic drug abuser	No details childhood are recorded.
Case 7-female, aged 28, unmarried, no children	Father's death 7 months before admission	Both parents alcoholic. Brother-drug addict. Brother-suicide-?cause	Severe parental conflict. Parents rejecting and emotionally distant.
Case 8-female, aged 22 Single mother of children	Death parents few months earlier. Mother died by suicide.		Patient described parents as distant, and not supportive. Childhood perceived as very unhappy. No separations recorded.
Case 9-female, aged 21	Abortion 4 weeks prior to admission	Mother-alcoholic	Mother described as rejecting and hostile. Father alleged to have beaten and sexually harassed the patient.
Case 10-female, aged 25 married with 3 children	Birth 3rd child ten weeks earlier. Recent threat to marital relationship	Mother promiscuous No diagnosed psychiatric disorder	Parents divorced when patient aged 7. She was raped at 13 by mother's 5rd husband. Mother hostile rejecting, promiscuous.
Case 11-female, aged 23 married with one child	Threat marital separation in past 7 days	Mother diagnosed as dependent personality disorder	Family shifted frequently. Patient fostered out several times in primary school years. Father died when patient aged 7. Mother described as hostile and rejecting.
Case 12-female, aged 24, defacto with 1 child	Threat separation from defacto.		Father abandoned family when patient aged 3. Poor relationship with violent alcoholic stepfather. Mother rejecting.

wered by an examination of the quality of the relationship with the remaining parent or parental figures. In which cases emotional deprivation in childhood leads to depression alone, and what other variables are involved to produce depressive symptoms in conjunction with borderline personality disorder remains to be answered.

It is acknowledged that this study is based on a small select group of inpatients. The authors are well aware of the inherent limitations such as lack of control groups, retrospective mode of data collection for follow-up and childhood experiences, and measurement of depressive symptoms by clinical assessment, not substantiated by any rating instrument. Further investigation with a larger group and more rigorous methodology is required.

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PERSONALITY AND DEPRESSIVE COGNITIONS

NEENA MURGAI¹

K. SATHYAVATHI²

Departmental Library
GMCH, Chandigarh

ABSTRACT

The present enquiry examined the relationship between cognitive distortions and certain personality variables, that is, self-esteem, locus of control, alienation and extroversion, in a group of neurotic depressives and a group of matched normals (N=30 in each group).

Results showed that neurotics, who had a significantly higher degree of distortions in their cognitions than normals, also had significantly lower self esteem, were significantly more alienated, and significantly more external in their locus of control, but did not differ from normals on extroversion. Correlational analysis revealed two significant relationships between CCI measures and personality measures in normals. In neurotics eight significant associations emerged. The findings seem to lend support to current cognitive formulations of depression and are in line with some trends in research investigating personality in depressives. The implications of the investigation are discussed.

A major area of research examining the psychopathology of depression relates to cognitive changes during depression. The theoretical viewpoint underlying these investigations assumes that certain characteristic cognitions have a prominent role in maintaining the depressed state. Beck (1967, 1976) postulated that patterns of thinking of depressed individuals are characterised by a 'cognitive triad' composed of negative attitudes toward the self, the world and the future. Empirical literature has brought out significant trends which lend support to his constructs (Giles and Shaw, 1987). Among attempts to measure cognitions within this framework was that of Crandell and LaPointe (1979) who devised Crandell Cognitions Inventory (CCI). It was validated by Crandell and Chambless (1981) who based on factor analysis derived four subscales, three of which correspond to the cognitive triad as described by the Beckian model. Murgai and Sathyavathi (1987) using the CCI mea-

asures in clinically depressed individuals showed that they distinguished them from normals in that they reported a higher degree of self-rated inferiority (SRI), helplessness (HE), hopelessness (HO) and detachment (D) as compared to normals.

Research pertaining to assessment of personality in depressed individuals has been criticised on the grounds that the trends observed may reflect phenomena coloured by the depressed state. The role of personality in the development of depression has, however, been addressed by several workers from diverse backgrounds. Paykel et al (1976) described neurotic traits as being characteristics of the pre-morbid personality of depressives, while Mattussek et al. (1982) proposed that a neurotic basic personality is a feature of neurotic depression. The relation of low self-esteem to the depressed state has been shown in therapeutic research (Wilson and Krane, 1980 ; Gardner and Gei, 1981) as well as by several others describing

¹Research Scholar, Department of Clinical Psychology, NIMHANS, Bangalore.

²Associate Professor of Clinical Psychology, Department of Clinical Psychology, NIMHANS, Bangalore.

lowered self esteem as important factor in depression proneness (Zeemore and Bre-tell, 1983 ; Smolen 1978 ; Lobitz and Post, 1979 ; Lewinsohn et al., 1980 ; Derry and Kuiper, 1981 ; Pietromonaco and Markus, 1986). Similarly, externality has been shown to be characteristic of depressives (Pryer and Steinker, 1973 ; Lefcourt, 1976 ; Rykman and Sherman, 1976 ; Leggett and Archer, 1979 ; Thyer and Papsdorf, 1981). Alienation as described by Seeman (1959) appears to be a relevant aspect to be studied in view of its observed relationship with self esteem (Ziller, 1973). The dimension of extroversion has also received attention in research, but findings have been equivocal.

In view of some observed trends in research in cognitive changes in depression and aspects of personality on depressed groups, in the present investigation an attempt was made to observe the relationship between the two sets of variables in a group of depressed individuals from a clinical setting.

METHOD

There were two study groups—an experimental group consisting of 30 diagnosed neurotic depressives from the NIMHANS out-patient population and a control group of 30 normal individuals. Only those with an ICD-9 diagnosis of 300.4 (WHO, 1978) who obtained a score above the cut off for neuroticism on Eysenck's Personality Inventory (EPI) (Abraham et al., 1977) and level of depression in Beck's Depression Inventory (BDI) (Beck et al., 1961) were included in the experimental group. Similarly, for the control group, individuals who had not sought psychiatric help were screened for neuroticism and depression before inclusion for the study. The two groups were matched for age and sex. Details of the criteria and demographics of the two groups are reported in Murgai and Sathyavathi (1987).

Besides the EPI and BDI which were used as screening tools, the following measures were used :

1. The Biodata sheet
2. Crandell Cognitions Inventory (Crandell and Lapointe, 1979)
3. Self Esteem Scale (Mackinnon, 1981).
4. Alienation Scale (Mackinnon, 1981).
5. Internal External Scale (Valecha, 1981).

Analysis included the use of 't' test for comparison of the two groups on measures of personality variables of extroversion, self esteem, alienation and locus of control. Further, product moment correlation coefficients were calculated for observation of the relationship of these variables to the measures of cognitive changes on the CCI.

RESULTS AND DISCUSSION

The data obtained on the measures of locus of control, self esteem, alienation and extroversion is presented in Table I.

Comparison of the two groups on the four measures of personality showed that neurotic depressives differ significantly from normals on locus of control, self esteem and alienation but not on extroversion. Individuals in the depressed clinical group appear to be significantly more external in their locus of control than normals who were internal in their orientation. The finding substantiates those of others on clinical groups in general and depression in particular (Pryer and Steinker, 1973 ; Lefcourt, 1976 ; Rykman and Sherman, 1976 ; Leggett and Archer, 1979 ; Thyer and Papsdorf, 1981), where it was shown that depressed groups perceive events as being out of their personal control to a greater extent than normals.

Self-esteem, an aspect of personality which has been extensively researched

Table I. Mean, Standard deviations and 't' values on measures of personality in neurotics and normals

Personality variable	Mean		S. D.		't'
	Normals	Neurotics	Normals	Neurotics	
Locus of control (LOC)	10.0	15.5	6.1	5.9	3.6*
Self esteem (SE)	24.4	32.8	11.5	6.8	3.4*
Alienation (A)	24.4	38.4	5.0	8.7	7.9*
Extroversion (E)	10.3	10.8	3.4	3.3	1.4

* $p < 0.01$

upon, is especially significant in therapeutic interventions with depressed individuals. In the present study those in the clinical group reported a significantly lower self esteem than normals. This finding is consistent with findings of workers on depressed groups (Smolen, 1978 ; Lobetz and Post, 1979 ; Lewinsohn et al., 1980 ; Derry and Kuiper, 1981 ; Pietromonaco and Markus, 1986). It also indicates that the depressive state is characterised by low self evaluations, an aspect which has been shown to improve with the lowering of the level of depression (Wilson and Krane, 1980 ; Gardner and Oei, 1981) and which has been shown to characterise depression prone individuals (Zeemore and Bretell, 1983).

Alienation, an aspect of personality describe by Fromm (1955) was further clarified in terms of the components of powerlessness, meaninglessness, normlessness, isolation and self estrangement by Seeman (1959). Mackinnon's (1981) alienation scale is a measure related to powerlessness and meaninglessness. In the present study, the depressed group appears to be significantly more alienated than normals. It may be expected that individuals who perceive events as being out of their personal control and evaluate themselves unfavourably, would experience powerlessness and meaninglessness. The findings seem to be in line with the observation of Ziller (1973)

who stated that persons with low self-esteem feel alienated because they are more dependent on external reinforcements.

Finally, it is observed that the two groups do not differ significantly from one another on extroversion. Both groups appear to fall into the range of ambiversion. The finding is expected in the light of literature in the area, which has revealed no clearcut trends.

In meeting the objective of examining relationships between aspects of personality and the measures of cognitive distortions, a correlation matrix was derived for the two sets of measures as shown in Table II.

Results shown in Table II reveal that there were two significant associations in the normal group while in the clinical group eight such associations were observed.

In the group of diagnosed neurotic depressives, self-rated inferiority was significantly positively associated with alienation, that is, individuals with higher self-rated inferiority also tended to be more alienated, a finding which is in line with that of Ziller (1973) who described those with low self evaluation as being more alienated and dependent on external reinforcements.

Helplessness, or a negative view of the world, was significantly related to self esteem (which was low) and alienation (which was high) in the clinical group.

Table II. Correlation coefficients between CCI measures and personality variables in neurotics and normals

CCI Measures	LOC		SE		A		E	
	Normals	Neurotics	Normals	Neurotics	Normals	Neurotics	Normals	Neurotics
SRI	0.22	0.08	0.64*	0.15	0.05	0.72*	0.24	0.05
HE	0.07	0.12	0.07	0.39*	0.01	0.41*	0.31	0.20
HO	0.10	0.36*	0.07	-0.65*	0.11	0.30	0.38*	0.35*
D	0.17	0.47*	0.10	0.03	0.04	0.37*	0.10	0.07

* Significant at 0.05 level.

Individuals in a depressed state seem to be harbouring an unfavourable view of their world and their self, and thereby seem to experience alienation or 'the emotional tone which accompanies any behaviour in which the person is compelled to act self destructively' (Feuer, 1973).

The aspects of hopelessness or a negative attitude towards the future which has been shown to be related to level of depression, was found to be significantly correlated with externality of locus of control and low self esteem. Thus depressed individuals seem to have low expectations of the future, probably as a result of their perceiving events in their life as not being in their personal control. It also appears that low self evaluations are linked with a negative outlook towards the future. These aspects of behaviour may be important determinants of motivational deficits in depressed individuals as described within the framework of Beck (1967, 1976).

Finally, the measure of detachment, which reflects a withdrawal from the environment, was found to be significantly positively associated with externality and alienation in depressives. This indicates that the more individuals perceive events as being out of personal control, and the more powerless and meaningless they feel, the more they tend to withdraw from situations in the environment.

In the normal control group, self-rated inferiority was significantly correlated with self esteem. It appears that individuals who less often experience thoughts which are derogatory to self, are those who have a favourable self esteem. Further, a significant positive association between hopelessness and extroversion was found in both groups. This finding cannot be adequately interpreted in the light of the fact that the two groups did not differ on extroversion and the scores of both fell in the range of ambiversion.

From the above findings the associations observed seem to indicate the distinct link between distorted cognitions and some aspects of personality, and offer valuable explanations of changes in behaviour and thinking in a depressed state. They seem to be consistent with same predictions of research in the area. However, the results have to be viewed in the light of the fact that the personality measures may have essentially given information on behaviour which is state-dependent, rather than a pervasive characteristic of individuals.

The distorted patterns of thinking reflecting self-rated inferiority, hopelessness, helplessness and detachment as also low self esteem, experience of alienation, and an external locus of control in depressed neurotics are likely to influence their interpersonal behaviour. As described

by Klerman et al (1984), it is manifest in interpersonal deficits and role disputes. The above findings should thus have implications for planning psychological interventions in depressed patients in line with Klerman's model.

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SOME OBSERVATIONS ABOUT BUSINESS EXECUTIVES ON A PERSONALITY INVENTORY

B. L. DUBEY¹

P. DWIVEDI²

S. K. VERMA³

ABSTRACT ✓

A large number of executives seek psychological help because they are not well equipped to cope up with the ever-increasing stressful situations. In the present study an attempt is made to study personality attributes of business executives on a questionnaire which measures five important personality variables viz. Emotional Instability, Depression, Psychoticism, Extraversion, Introversion and Social Desirability. Construction and Standardization of this inventory is reported. It has been found to be a reliable and valid tool justifying further work.

The present century has been branded as "The age of Stress and Anxiety". Different persons however react differently to the perceived stress depending upon their personality. An executive has to face a number of situations giving rise to stresses in his day to day work (Yates, 1976). Because similar stressors often make different individuals respond quite differently. an executive who is emotionally stable, flexible, open, warm hearted and free from emotional problems can manage stressors better than others and lead the life of a successful executive (Dubey et al., 1980).

Although the personality profile of a successful executive is one of creative, intelligent, well adjusted, emotionally stable and quick in decision making (Dubey et al, 1982), reviewing literature, the authors could not find any suitable test to measure these characteristics. Since the executives are busy people the authors felt the need of constructing and standardizing an inventory which could easily identify emotional, social or any other significant maladjustment or disorder in a reliable manner.

PERSONALITY VARIABLES/DIMENSIONS USED IN THIS INVENTORY

(a) *Extraversion*—It measures tendency to be outgoing, carefree, easy going, optimistic and aggressive.

(b) *Psychoticism* : This shows a tendency to exhibit a variety of socially unacceptable and odd behaviour patterns and a high score does not mean psychotic process.

(c) *Emotional Instability* : Under stress, some persons show a variety of neurotic symptoms which persist for unusually long periods of times and a high score means a tendency to develop such symptoms under stress.

(d) *Depression* : Many persons under stress develop symptoms like feelings of sadness, psychomotor retardation, helplessness and hopelessness. Higher the score, greater is the tendency to show such symptoms during stress.

(e) *Social Desirability* (Lie scale) : This is a tendency to give socially desirable responses rather than real ones. It consists

¹ Faculty Member, Department of Business Management, Punjab University, Chandigarh-160014.

² Social Worker, Department of Community Medicine, P. G. I., Chandigarh.

³ Associate Professor, Department of Psychiatry, P. G. I., Chandigarh-160012.

of "too-good-to-be-true" items and a high score means that the individual has a tendency to appear in a favourable light.

CONSTRUCTION OF THE INVENTORY

Initial pool of the items : Reviewing the related literature including some well known inventories of personality, a large number of items pertaining to above personality variables were selected. From this item pool of over 200 items, certain items were considered or modified in order to have mutually exclusive items as far as possible. Thus the preliminary form of the inventory consisted of 125 such items, covering 5 dimensions of personality (viz. Emotional Instability, Depression, Psychoticism, Extraversion and Social Desirability).

Preliminary Tryout: The preliminary form of Executive Personality Scale was administered to 30 executives. They were requested to give responses in "yes" or "no" to each of these items. As a result of experience gained with this preliminary administration of the scale and considering the comments of certain experts in the field of test construction, some items were dropped or modified. Thus the second form of the scale was prepared which had a total of 100 items.

Second tryout-Item Analysis and Item Selection: The second form of Executive Personality Scale consisting of 100 items was administered to 100 executives of a Public Sector Industry. They were in the age range of 20 to 52 years (Mean : 35.10 years, SD : 6.90 years). For the item analysis E 1/3 value was computed and 50 items were finally selected (i.e. 10 items of each of the personality dimensions).

The value of E 1/3 ranges from 0.18 to 0.84 which is considered satisfactory and acceptable. For other items it was not so and hence they were rejected.

Scoring : The Scoring procedure of the scale is very simple. Every 'yes' response is scored as 1 and response of 'no' as zero. On each sub-scale one may score zero to 10.

Standardization : The final form of the inventory was administered on 323 employees (both male and female) of a public sector industry. The employees were in the age range of 20 to 54 years (Mean 35.90 ; SD : 6.80) with educational range of high school to post-graduate. The means and standard deviations were computed for each dimension of personality. The scale was also given to 175 graduate engineers seeking employment during selection. Means and standard deviations

Table-1

Personality Dimensions	Public Sector Employees (N = 323)		Graduate Engineers (N = 175)	
	Mean	SD	Mean	SD
Emotional Instability	4.13	2.30	2.06	2.04
Depression	4.72	1.68	2.21	1.39
Psychoticism	3.05	1.69	1.65	1.59
Extraversion	7.19	1.54	7.02	3.12
Social Desirability	3.56	2.06	2.46	1.62

Note : Possible range for each Scale is 0 to 10.

of this group, alongwith 323 public sector employees are shown in Table 1.

Reliability and validity of the inventory

Test—retest reliability was calculated on a sample of 31 employees of a public sector industry with an interval of one month. The value of coefficients of correlations was computed by Spearman's Rank order method (Garrett, 1973). The results of *r* are presented in table 2.

Table-2

Dimensions/Variables	Value of <i>r</i>
Emotional Instability	0.57
Depression	0.70
Psychoticism	0.57
Extraversion	0.82
Social Desirability	0.46
For full inventory	0.61

All the correlation co-efficients significant ($p < .01$)

For finding out the validity of the devised inventory, face validity, content validity and empirical validity were attempted. The scale was shown to a number of experts in the area of personality test construction and they all agreed with the measured dimensions of personality. It has content validity as shown by the fact that a large pool of items for each of the five sub-areas is included and further modified after each tryouts. Empirical validity is established by correlating with other scales measuring different dimensions. For this purpose three other scales namely Job Satisfaction Scale (Dubey *et al.*, 1987), Quality of life Scale (Dubey *et al.*, 1987) and Psychoticism-Extraversion Neuroticism (PEN) were administered along with the devised inventory upon 25 employees of a public sector industry.

Table-3

Correlations of Personality Inventory Dimensions
Job Satisfaction Scale, Quality of life Scale and PEN
(*N* = 25)

(a) Emotional Instability and Job Satisfaction	
(b) Depression and Job Satisfaction	-0.50**
(c) Psychoticism and Job Satisfaction	-0.14
(d) Extraversion and Job Satisfaction	-0.10
(e) Social Desirability and Job Satisfaction	-0.42*
(f) Emotional Instability and Quality of Life	-0.03
(g) Depression and Quality of Life	-0.19
(h) Psychoticism and Quality of Life	-0.24
(i) Extraversion and Quality of Life	-0.39*
(j) Social Desirability & Quality of Life	0.37
	0.23

* Significant at .05 level

** Significant at .01 level

It can be concluded that this inventory appears to be a reliable and valid tool for measuring certain commonly assessed personality variables in the adult subjects particularly those holding executive jobs. There is however need to carry out further work to further establish its empirical validity specially upon a substantial number of successful executives.

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Appendix-I (Personality Inventory)

Please tick (✓) 'Yes' or 'No' whichever may be most suitable to you

1. I generally get impatient if someone makes me wait.
2. I do not have much enthusiasm in my work.
3. Do you enjoy hurting the feelings of persons you love ?
4. Do you have a ready answer if someone asks you ?
5. Do you always keep your promise, no matter how inconvenient it might be for you ?
6. Sometimes I get so much angry that I cannot speak anything.
7. I am easily upset by a small event of disappointment.
8. Do people become offensive easily ?
9. I make friends easily.
10. All my habits are good and desirable ones.
11. I feel highly discouraged when my views differ from others.
12. At times I feel that life is not worth living.
13. Have you had an awful events of bad luck ?
14. I enjoy going out a lot than sitting inside.
15. I am totally free from all sorts of prejudices.
16. My mood usually changes without apparent cause.
17. I worry too much when someone in the family gets sick.
18. I feel lonely on most of the occasions even when I am with others.
19. I think I am a talkative person.
20. I do not get irritated whatever may happen.
21. I often take very long time to recover from a strong emotion.
22. When I see anyone sad I also feel sad.
23. I don't care what happens to me.
24. I like lots of houstle and bustle.
25. I have never talked behind a person.
26. I am quick temp. red person.
27. I generally think that I may not be successful in life.
28. Do you remain worried about catching diseases ?
29. I do not hesitate to contact important persons.
30. I have never been late for an appointment.
31. I cannot tolerate people who are unreasonable to me.
32. I do not feel confident in my ability.
33. Do you loose your friends easily without your fault.
34. I usually tell my problems to others.
35. Do you always reply a personal letter soon after you have read it.
36. My feelings are easily hurt by the comments and actions of others.
37. For my past mistakes I feel very much unhappy.
38. Do people say and do things to annoy you ?
39. I enjoy telling jokes to my friends.
40. I never keep things pending for tomorrow what I need to do today.
41. I very often worry over possible bad luck.
42. I do my work slowly and leisurely.
43. Do things sometimes look as if they were not real ?
44. I enjoy mixing with people.
45. I never told a lie in my life.
46. I often thought of running away from present circumstances.
47. I am easily moved to tears.
48. Are you generally not keeping good health ?
49. I like people around me.
50. I never indulge in gossip.

PERSONALITY FACTORS IN CORONARY ARTERY DISEASE

ASHOK KUMAR¹

KRISHNA KANWAL²

J. N. VYAS³

ALKA SINGH⁴

Coronary artery disease (CAD) is a world wide disease with local differences in incidence, severity and natural history. CAD is a multifactorial disease. The life long behaviour pattern such as type A behaviour along with high manifest anxiety and neuroticism may be considered as risk factors for CAD. Smoking habit, physical inactivity and high intake of saturated dietary fats alongwith raised levels of serum lipids may bear some relationship with the occurrence of CAD. The present study was aimed at identifying and to understand the significance of predisposing and precipitating personality factor for coronary artery disease.

MATERIAL AND METHOD

The present study was undertaken to find out the role of personality pattern which include type A behaviour and orthogonal dimensions of Eysenck in CAD patients.

To fulfil the above aim 30 consecutive index patients who had suffered from CAD and were being followed up in the Ischemic Heart Disease speciality clinic at S.M.S. Hospital for more than 6 months were taken for evaluation. All the subjects had definite ECG evidences of CAD.

Further, the selection of 30 normal control subjects matching in terms of age, sex, diet, and socioeconomic status was done in the following order of preference :

- A. To control the diet factor, healthy individual of comparable age and sex from the patients family was taken as control.
- B. If such family member was not available then control subject of comparable age, sex, dietary habits and socioeconomic status was taken from non-sick population. Further, it was ascertained that none of the control had any past history and or ECG evidence suggestive of CAD.

All the patients and controls were subjected to detailed evaluation by a specially designed proforma having sociodemographic data, details of history, clinical examination and relevant laboratory investigations and ECG. All the studied subjects were administered the following tests :

- ✓ 1. Modified Adjective Check List-ACL type A (Herman et al., 1981).
- ✓ 2. Hindi version of Eysenck's Personality Inventory.

RESULTS AND DISCUSSION

Analysis of the results reveals the following :

Majority of the patients (63.3%) were from age group 41 to 60 years. No case was detected below 30 years of age. Men to women ratio in CAD group was 2.7 : 1. Similar high incidence of CAD in the age

¹ Asstt. Professor in Psychiatry, Department of Psychiatry, J. L. N. Medical College, Ajmer.

² Asstt. Professor in Psychiatry Department of Psychiatry, S.M.S. Medical College, Jaipur.

³ Superintendent & Head, Department of Psychiatry, S.M.S. Medical College, Jaipur.

⁴ Lecturer in Psychology, Government College, Udaipur.

group of 40 to 60 years also observed by Vakil (1949) and Vytilingum (1964). Higher incidence (46%) of CAD was observed in skilled workers, executives, persons in administrative jobs, professionals, qualified technical persons and by businessman. Present study revealed that 83% of CAD patients belonged to upper or upper middle socioeconomic class. Vytilingum (1964) and Jhatakia (1966), observed that CAD was equally common in both higher and lower socioeconomic group. This difference seems to be on account of selection procedure of the sample. Since awareness to use medical facilities is increasing in lower socioeconomic group, the trend of reporting of incidence may change in future.

Table 1. Demographic Characteristics

	CAD Patients (N=30)		Controls (N=30)	
	N	%	N	%
Sex				
Male	22	73.3	22	73.3
Female	8	26.7	8	26.7
Age (in yrs.)				
upto 40	2	6.7	1	3.3
41-50	10	33.3	11	36.7
51-60	9	30.0	10	33.3
above 60	9	30.0	8	26.7
Occupation				
Administrative & executive	6	20.0	4	10.0
Professionals & qualified technicians	2	6.7	1	3.0
Govt. and private low grade servants	3	10.0	4	7.0
Small scale business	5	16.7	6	11.0
Large scale business	6	20.0	8	14.0
Light to moderate manual labour	8	26.7	7	15.0

$\chi^2=0.04$, d.f.=3, N. S.

$\chi^2=1.28$, d.f.=4, N. S.

Income (per capita/month in Rs.)

300 and above	14	46.7	12	40.0
150-299	11	36.7	11	36.7
70-149	4	13.3	5	16.7
30-69	1	3.3	2	6.7
less than 30	0	0.0	0	0.0

$\chi^2=0.74$, d.f.=4, N. S.

Table 2. Smoking Habits

	CAD patients (N=30)		Controls (N=30)	
	N	%	N	%
Smokers	18	60.0	11	36.7
Non smokers	12	40.0	19	63.3

$\chi^2=3.26$, d.f.=1, $p < .05$

Table 3. Distribution of ACL-Type A Scores in Populations

	CAD patients (N=30)		Controls (N=30)	
	N	%	N	%
< 31.13	6	20.0	23	76.7
31.14-39.23	10	33.3	3	10.0
39.24 and above	14	46.7	4	13.3

$\chi^2=19.26$, d.f.=2, $p < .01$

Table 4. Comparison of Mean Type A Scores of Population

	Mean	S. D.
Patients (N=30)	40.3	10.46
Controls (N=30)	23.8	13.77

$t=5.23$, d.f.=58, $p < .01$

Table 5. Distribution of Neuroticism and Extroversion Scores

	CAD Patients (N=30)	Controls (N=30)
<i>Neuroticism</i>		
Mean	11.10	6.80
s. d.	4.18	3.81
<i>Extroversion</i>		
Mean	14.60	7.40
s. d.	4.18	3.46

$t=7.74$, d. f.=58, $p < .001$

60% of the CAD patients were smokers while only 36% of the controls were smokers. There was a longer duration and more amount of smoking in patients group than in the controls.

There was a significant difference between the mean type A scores of patients and controls ($p < .01$). Mean A scores of patients and control subjects were 40.3 and 23.8 respectively. About 46.6% of CAD patients belonged to type A personality pattern while only 13.3% of control subjects were type A. Our observation are in accordance with the studies of various authors (Jankins, 1975; Roserman, 1975; Friedman, 1977, Seth and Sakesena, 1977; Seth 1979). As regards to relationship between different orthogonal dimensions of personality of Eysenck and coronary artery disease, it was found that CAD patients score more than controls on extraversion and neuroticism scores ($p < .01$). Mean scores of extraversion of CAD patients and

control subjects were 14.6 and 7.4 respectively. Mean scores of neuroticism of CAD patients and control subjects were 11.1 and 6.8 respectively. Our observations are considerably in accordance with the observations of Shanmugam (1979).

To conclude, coronary artery disease is a multifactorial disease which include high intake of dietary fats, smoking, heridity, physical inactivity and psychosocial factors. The study shows that the personality factors are not quite independent but are rather of contributory nature in the etio-pathogenesis of coronary artery disease.

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PERSONALITY NEEDS OF NON-DELINQUENT AND DELINQUENT BOYS

R. KANNAPPAN¹

AND

K. V. KALIAPPAN²

ABSTRACT

The present research attempted to study the personality needs of two groups, namely non-delinquent and delinquent (wandering and theft) boys. The sample comprised of non-delinquents studying in 6th to 10th Standard in St. Mary's School, Madras, and delinquents studying in 6th to 10th Standard in Approved School, Chingleput. They were in the age group of 13 to 18 years. Data was collected from both groups and analysed by t-test. Delinquent wandering group significantly differed in n-achievement, n-change and n-order whereas delinquent theft group significantly in terms of n-order only. The reasons for the observed significant differences in the two groups of delinquents as compared to the non-delinquents have been discussed in the light of available studies in this area.

A person who lacks motivation to achieve, creates more problem behaviour for authorities (Frankel, 1960 ; Gowan, 1955). These behaviour patterns may be usually regarded as hostile and aggressive towards authority. Conflicts with parents are also likely to be carried over to authority figures outside the home. Behaviour difficulties in children such as truancy, stealing, lying, backwardness in school subjects are due to the thwarting of psychological needs of security, affection, affiliation etc (Moodie, 1960). Moodie emphasised the importance of these needs in children. Child who feels insecure attempts to satisfy certain unfulfilled needs through aggressive acts, seeing films and the like.

Few motives have received as much attention from personality researchers in recent years as the need to achieve (n-achievement) and the need to affiliation (n-affiliation). Murray (1938) has developed the concept of motivation in an attempt to formulate a comprehensive system for the description of behaviour. It is usually multi-need determined (Coleman, 1969) and as such motivational ana-

lysis involves the complex interaction of many needs. Needs of the person determine the direction of behaviour and thus change the organism's relation to environments. Further, needs arrange themselves in a hierarchy from the basic biological needs to need for self-fulfilment or actualization which represents the human personality (Maslow, 1954). The present study was aimed at evaluating the personality needs of delinquent and non-delinquent boys.

METHODOLOGY

Sample :

Non-delinquent boys studying in 6th to 10th standard in St. Mary's School, Madras, and delinquents studying in 6th to 10th Standard in Approved School, Chingleput, filled up the personality needs inventory. Theft and wandering offences were taken for this investigation. They were in the age group of 13 to 18 years, having no physical illness, epilepsy or psychiatric illnesses.

Tools :

Sharma's Personality Need Inventory (PNI) is designed primarily as an instru-

¹ UGC Research Associates
² Professor

Deptt. of Psychology, University of Madras, Madras-600 005.

ment for research to provide quick and convenient measures of relatively independent personality variables. The statement in PNI purports to measure the psychological needs and differentiate from social desirability. The investigators in the present investigation restricted the choice of four needs : n-achievement (n-Ach), n-affiliation. (n-Aff), n-change, (n-cha) and n-order (n-ord).

Description of the instrument : The PNI has 28 pairs of statements which are related to personality needs. In each pair, there are two statements and the subjects were asked to put a tick mark against the statement which they liked more.

Administering the Test : The PNI provides the instructions and guidance both in English and Tamil to answer the inventory. Additional instructions were given as to how to fill up the inventory. No time limit was enforced. Scoring was done according to the test manual.

RESULT

A look at the table shows the mean values of delinquent (wandering and theft) groups and non-delinquent group. The delinquent group (wandering) has scored higher in need achievement, need-affiliation and need-change of personality than non-delinquent group. The other delinquent group (theft) has scored higher in need-achievement and need-order of personality than non-delinquents, but Wilkes (1977) has found out no significant differences between two black college student groups. In n-Ach, the non-delinquent group has differed significantly from delinquent wandering group but not with the delinquent theft group. In n-aff, the non-delinquent group has not differed significantly from both the delinquent groups. In n-change, the non-delinquent group has differed significantly from delinquent wandering group but not with delinquent theft group. In n-order, the non-delinquent group has

Table 1 :—Means, standard deviations and t-values of non-delinquent and delinquent groups.

Personality needs	Non-delinquent group (1) (N=95)	Delinquents	Intergroup comparison		
			Wandering group (2) (N=101)	Theft group (3) (N=31)	1 & 2 1 & 3 2 & 3
n-achievement	Mean	43.98	48.75	46.94	3.24* 1.41 1.14
	S. D.	11.77	7.97	7.70	
n-affiliation	Mean	57.49	57.97	56.68	
	S. D.	11.42	8.95	7.89	0.33 0.44 0.77
n-change	Mean	47.98	52.39	45.68	
	S. D.	7.22	6.35	6.58	4.55* 1.64 5.0*
n-order	Mean	48.88	46.56	52.44	
	S. D.	7.35	7.84	6.56	3.96* 2.12** 4.17*

* Significant at 0.01 level ** Significant at 0.05 level

differed significantly from both delinquent groups, theft and wandering.

In n-change and n-order, the delinquent wandering group has differed significantly from the other delinquent group but there is no significant difference between the delinquent groups in n-Ach. and n-Aff.

DISCUSSION

The delinquent groups (wandering and theft) have high score in n-Arch. of personality. The group which has got high n-Ach. enjoys activities that enable him to evaluate and improve its skills, in competing with others. The group members are task oriented; they would do a difficult job well; they would solve difficult problems and puzzles. Young persons who rate high on measures of n-Arch. are likely to be future oriented (Watson and Lindgren, 1979).

There is no significant difference between non-delinquent and delinquent (wandering and theft) groups in n-Aff. of personality. This means that the groups are equal to be loyal to friends, to participate in friendly groups, to do a thing for friends, to form new friendship, to make as many friends as possible, to share things with friends rather than alone, to form strong attachments, to write letters to friends etc., Redl and Wineman (1951) assert that most offenders who commit crime against outsiders maintain moral values in their relationships with friends and relatives.

There is significant difference between non-delinquent and delinquent wandering group but not with delinquent theft group in n-change of personality. Higher scores on delinquent wandering group and non-delinquent group shows that the group members could do new

and different things, travel, meet new people, experience novelty and change in daily routine, experiment and try new thing, carry out different jobs, move about and live in different places and participate in new fads and fashions.

The three groups differ significantly from one another in order of personality needs. This indicates that the group members have different ways before starting on a difficult task, e.g. to make advance plans when taking up a trip, to organise details of work, and arrange things so that they run smoothly without change.

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PSYCHOMETRIC ASSESSMENT IN HEAD INJURY CASES

R. KISHORE¹

AND

K. DUTTA²

ABSTRACT

150 cases of head injury were assessed on psychometric tests and followed-up after six months of the initial assessment. It was found that psychometric tests could reliably indicate the degree of impairment and also improvement in these cases. The paper provides a comprehensive assessment of organicity through WAIS, WMS, BGT and HIT.

Head injury by its frightening manifestations has attracted attention of man since centuries. Head injuries are quite common in the armed forces personnel since they are often a target of injuries through missiles, bullets and other objects. The behavioural problems often arise after the critical phase is over as after-effects. D'Netto and Kishore (1975, 1976) and Pande (1976) have found that many a time the behaviour problems are missed on simple neurological examination and also on conventional ancillary tests as EEG, X-ray or ventriculogram.

Impairment in mental faculties like intelligence, memory and personality functioning can hardly be evaluated on ancillary tests. It is necessary to quantify the impairment from the point of view of placement and rehabilitation as well as to monitor the progress of recovery especially in cases of post-traumatic brain damage, a condition which is rather non-progressive.

It is being increasingly recognised that the mental symptoms following head injury are not functional or neurotic in nature and may well be the after-effects of brain damage. Oppenheimer (1968), Taylor and Bell (1967), Mersey and Woodford (1972), Lishman (1968) and Chatterjee and Kishore (1979) have observed that the general deterioration of

higher mental functions which is generally present on psychiatric evaluation is not psychogenic. It is in this perspective that even in the absence of positive neurological signs psychiatric assessment with the help of selected psychometric tests may prove extremely useful.

MATERIAL AND METHOD :

This is a post facto study. The clinical records and psychometric reports of 150 cases with clear history of head injury admitted at Command Hospital (C.C.), Lucknow, during the period of 1972 to 1979 were analysed. A battery of psychological tests consisting of Bender Gestalt test (BGT), Wechsler Memory Scale (WMS), Wechsler Adult Intelligence Scale (WAIS) and Holtzman Ink Blot Test (HIT) was administered on each patient by the first author. The psychometric assessment was done at two stages i.e. initial assessment after head injury at the time when patient became communicative and cooperative and subsequently a follow-up assessment after a period of six to nine months from the date of initial assessment.

OBSERVATIONS :

The following table shows the frequency of signs and symptoms evident on mental status examination.

1. Psychologist, Command Hospital (C. C.), Lucknow.

2. Psychologist, Department of Psychiatry, K. G. Medical College, Lucknow.

Table No. 1

Symptoms/ Main complaints	Initial Assessment (after one month of head injury)		Follow-up Assessment (after 8 months)	
	N	%	N	%
	36	24.0	16	10.7
Headache	60	40.0	28	18.6
Giddiness	102	68.0	68	45.3
Irritability	16	10.7	4	2.6
Insomnia	88	58.6	56	37.3
Forgetfulness	84	56.0	32	21.3
Lack of Concentration	20	13.3	16	10.7
Apprehensive	27	18.0	69	46.0
No Psychiatric Symptom				

Most of the patients presented with more than one symptom. The follow up study shows substantial decrease in these symptoms with passage of time (Table-1).

Table 2 exhibits intellectual impairment in more than three-fourth of the cases at the initial assesment. This could be due to the confusion and poor concentration which is so common after head injury. Data analysis in terms of the verbal I.Q. and performance I.Q. of these patients (initial assessment) reveals that

their scores on the verbal sub-tests are more adversely affected than on performance sub-tests. Follow-up assessment of these patients showed considerable improvement (44.7% showing no impairment as compared to 21.3% cases in this category at the initial assessment).

Table 3 shows that the memory impairment was quite substantial at the time of initial assessment (59% cases) although they show remarkable recovery during follow-up assessment after 6-9

Table No. 2 WAIS Results on Composite I. Q.

Degree of Impairment	Initial Assessment		Follow-up assessment		Z values
	N	%	N	%	
No impairment (IQ 86 & above)	32	21.3	67	44.7	4.34***
Mild impairment (IQ 50 to 85)	79	52.7	60	40.0	2.31**
Severe impairment (IQ below 50)	89	26.0	23	15.3	2.12*

* Significant at .05 level;

** Significant at .01 level;

*** Significant at .001 level.

Table No. 3 Wechsler Memory Scale

Memory impairment	Initial assessment		Follow-up assessment		Z values
	N	% age	N	% age	
No impairment (MQ 91 & above)	62	41.3	127	84.7	7.69***
Mild impairment (MQ 50 to 90)	73	48.7	14	9.3	1.15
Severe impairment	15	10.0	9	6.6	1.04

*** Significant at .001 level.

Table No. 4 B. G. T. Z Scores

B. G. T. Scores	Initial Assessment		Follow-up Assessment		Z Values
	N	%	N	%	
No evidence of organicity (Below 67)	49	32.7	103	68.7	6.36***
Mild organicity (67 — 90)	20	13.3	9	6.0	2.43**
Severes organicity (91 & above)	79	52.6	38	25.3	4.84***

** Significant at 0.01 level;

*** Significant at 0.001 level.

months (85% showed no memory impairment). The patients had exhibited difficulty in registration and recall especially with respect to immediate memory.

Table 4 suggests that the signs of organicity could be well demonstrated on Bender Visuo Motor Gestalt Test and the findings seem to be well in conformity with the observed improvement on other cognitive tests.

In accordance with HIT test manual, 5 or more qualitative signs of organicity was the criteria of organic involvement (Holtzman et al., 1961). The qualitative signs of organicity are rejection of more than 50% of the cards, confabulatory 'W'

responses, poor 'form definiteness,' inadequate appropriateness, large number of colour responses, low shading responses, inadequate integration, absence of human movement, few popular responses, perplexity and impotency of responses. In sample of organic cases, Dutt (1987) too observed the same organic signs on HIT. The follow up assessment scores of HIT do provide a substantial evidence of organicity in nearly two third of the cases even after a lapse of 6-9 months and perhaps that may be the reason for the presence of a variety of psychiatric signs and symptoms as elicited during mental status examination at the time of follow-up (Table—1).

Table No. 5 Organicity as observed on Holtzman Ink Blot Test

Signs of Organicity	Initial Assessment		Follow up Assessment		Z values
	N	%	N	%	
No evidence of organicity (4 or less signs)	33	22.0	49	33.0	4.97***
Mild organicity (5 to 7 signs)	93	62.0	73	48.0	6.03***
Severe organicity (More than 7 signs)	24	16.0	28	19.0	1.06

*** Significant at .001 level.

DISCUSSION

Psychometric assessment has been done in order to know the extent of neuro-psychological disturbances which are often missed otherwise in cases of head injury. There are several reports demonstrating utility of psychometric assessment in these cases (D' Netto and Kishore, 1975 and Chatterjee and Kishore, 1979). It is being increasingly recognised that the mental symptoms following head injury are not necessarily functional in nature (Lishman, 1968). The observations of this study suggest that the psychometric tests can grade the individuals on the basis of their performance on the tests in a more objective manner.

In the initial assesment the psychometric tests could identify the impairment in 60 to 80 per cent of the cases whereas the follow-up assessment shows impairment in a remarkably lesser number of cases. The follow-up data further confirms the findings of Chatterjee and Kishore (1979) and Lishman (1968) that the prognosis of brain trauma cases is not as bad as it is generally considered.

On the whole, there is ample evidence of the efficacy of psychometric tests to detect organic involvement especially in view of the fact that one does not find

any conclusive evidence of O.B.S. during mental status examination of these patients.

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A STUDY OF OVERINCLUSIVE THOUGHT DISORDER IN PARENTS OF SCHIZOPHRENICS

PRABHAT SITHOLEY¹

B. B. SETHI²

S. C. GUPTA³

ABSTRACT

The study aims at testing the hypothesis that the parents of schizophrenics contribute to genesis of overinclusive thought disorder in their schizophrenic offspring. Using modified Goldstein Object Sorting Test and Proverb Test as measures of overinclusion, 30 parents of thought disordered schizophrenics were compared with control parents. Since the parents of schizophrenics were not found to be significantly more overinclusive than controls, the above hypothesis could not be confirmed.

Among the clinical diagnostic criteria of schizophrenia, thought disorder still remains an important consideration. Schizophrenics are known to be vague, illogical and incoherent in their thinking. Many hypotheses have been used to explain schizophrenic thought disorder. Overinclusion is one of the hypotheses (Cameron, 1939). It implies that the schizophrenics are unable to maintain normal conceptual boundaries and incorporate into their concepts elements, some of them personal, which are merely associated with the concept but are not an essential part of it. Many studies have confirmed the theory of overinclusion (Payne et al, 1959 ; Payne and Hewlett, 1960; Payne and Friedlander, 1962 ; Hawks and Payne, 1971 ; and Tucker, 1975). It has also been hypothesized that schizophrenic psychopathology is due to parental inculcation of distorted, confused and contradictory meaning in the children. This would mean that the parents of schizophrenics have a formal thought disorder (mild, sub clinical type) and that they are responsible for genesis of thought

disorder in their schizophrenic offsprings (Bateson, 1956 ; McConaghy, 1959 ; Philips et al, 1965; Singer and Wyne, 1965; Romney, 1967 ; Muntz and Power (1970). Romney (1969) and Hirsch and Leff (1975) however could not confirm this view. The hypothesis that the parents transmit their formal thought disorder to their schizophrenic offsprings therefore remains debatable. The present study was undertaken to test the above hypothesis in relation to overinclusive thought disorder.

MATERIAL AND METHOD

The sample was drawn from the parents of 68 thought disordered schizophrenics (DSM II diagnosis) hospitalised during a period of nine weeks in the department of Psychiatry. The schizophrenic index cases and their parents were selected using the following criteria :

1. At least one parent should be available for the study.
2. The parents should not have obvious impairment of vision or hearing after correction.

1. & 3. Readers, Department of Psychiatry, K. G's Medical College, Lucknow-226 003.
2. Director, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow. and Professor & Head, Deptt. of Psychiatry, K.G's Medical College, Lucknow.

8. The parents should not have mental retardation (IQ below 80) as assessed through Bhatia battery of intelligence (Bhatia, 1955).

In all, there were 22 index cases where atleast one parent was available for the study. One father had an IQ of 75 and since the mother in this case was not alive, this index case was excluded. Of the parents of remaining 21 index cases, 1 mother was a chronic schizophrenic who could not be administered tests of overinclusion, 4 parents were dead and 7 could not be made available for the study. The final sample therefore consisted of 30 parents (experimental group of 21 schizophrenic index cases). The study had two control groups, i.e. an equal number of parents of non-schizophrenic psychiatric patients (neurotics, mentally retarded or epileptics), and of normal persons matched with the experimental group in terms of age, education and domicile.

Both the experimental and control subjects were administered Hindi Proverb test and modified Goldstein and Scheerer's Object Sorting Test (1941) to measure overinclusion. These tests were adopted for Hindi speaking population and their pretesting on 35 normal subjects did not suggest any difficulty in administration or scoring. Further details of these tests can be obtained from the third author.

The modified Object Sorting Test contains 39 objects, as compared to 27 objects in the original battery of Goldstein Scheerer Test (1941) since many of the items in the battery were not familiar to the people in our culture. These were replaced by the familiar ones and some extra items were added as well to make the test suitable for measurement of overinclusion (See Appendix). In the modified Object Sorting Test the subject is required to form an abstract concept around a stimulus object (point of departure). The subject chooses his first stimulus (which serves as an example)

but the other three are fixed. These are a red plate, a box of matches and a bicycle bell. The subject after being presented with a stimulus object looks at it for sometime and then hands it back to the examiner, who places it out of his sight. The subject is then asked to pick up those objects, that he thinks can go with the stimulus object in some way. These are also placed away from his sight. Overinclusion is assessed by the average number of objects picked up in response to these three stimulus objects. Greater the numbers of objects picked up, more is the overinclusion.

The Proverb Test consists of 14 Hindi proverbs of daily use. Each proverb was written on a card, which was handed over to the subject. In case of an illiterate subject the proverbs were read aloud to him and repeated, if necessary. The subject is requested to explain the proverb. In this manner the 14 proverbs are presented one after another. The responses given are tape recorded verbatim and later on transcribed. Overinclusion can be detected by finding out the average number of words used for explaining the 14 proverbs. More the number of words used greater the overinclusion.

OBSERVATIONS AND RESULTS

Mean age of schizophrenic index cases was 21.5 years. The experimental group subjects (the parents) consisted of 53.3% males and 46.7% females and their mean age was 46.1 years. A majority of male subjects was either in a skilled or office job whereas all the females in the group were house-wives.

The subjects of the control group were considerably matching the experimental group with regard to their sex, age, religion, occupation and marital status.

The results of the object sorting test are summarized in Table 1. A majority of subjects in both the experimental and control groups picked up mostly

Table-I. (Object Sorting Test) Average no. of objects picked up

Average number of objects picked up for three test stimuli	Experimental	Control
1.5—3.5	8	7
3.5—5.5	13	15
5.5—7.5	4	7
7.5—9.5	3	1
9.5—11.5	1	—
11.5—and above	1	—
Median	4.58	4.57
Quartile Dev.	1.44	1.04

Median Test : $X^2=0.07$, d. f. = 1, NS.

Table-II. Proverbs Test Average no. of words used

Average number of words used to explain the proverbs	Experimental	Control
5—10	—	3
10—15	3	9
15—20	10	7
20—25	5	6
25—30	4	2
30—35	1	2
35—40	2	1
40—45	1	—
45—50	2	—
50 and above	2	—
Median	22.00	17.14
Quartile Dev.	7.62	5.21

Median Test : $X^2=1.67$, d. f. = 1, NS.

2-5 objects in the three standard trials of object sorting test. The data shows a tendency of picking up a greater number of objects by more subjects in the experimental group. There are also a greater number of subjects in experimental group who picked up an average 7.5 or more objects as compared to controls (5 and 1 respectively). However, both the experimental and control groups could not be statistically differentiated on the object sorting test.

Findings of the Proverb Test (Table 2) are also in conformity with the Object Sorting Test. The average number of words used to explain the proverbs was 26.5 and 17.9 for the experimental and control group respectively. Although not statistically significant, there was an impression that more often larger number of words (20 or more) were used by the experimental subjects ($N=17$) than the control group ($N=11$) in explaining the proverbs.

DISCUSSION

The results of this study show a tendency among the parents of clinically thought disordered (overinclusive) schizophrenics to be more overinclusive than the control parents but the difference is not statistically significant. The hypothesis that the parents of overinclusive schizophrenics also have an overinclusive thought disorder and that they contribute to the genesis of overinclusive thought disorder in their schizophrenic offsprings, atleast in any direct sense is therefore, not proven. Nevertheless, among the experimental subjects was one chronic schizophrenic mother who could not be administered tests of over-inclusion and was excluded. If she were included the results could have possibly tilted in favour of the hypothesis.

There has been some evidence that acute and paranoid schizophrenics are

more overinclusive than other schizophrenics (Payne and Hewlett, 1960; Hawks and Payne, 1971). The number of acute and paranoid schizophrenics was only 5 in this study. It is possible that if greater number of parents of acute and paranoid thought disordered schizophrenics were studied the results might have been significant.

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APPENDIX

Goldstein Object Sorting Test (Modified Form):

The modified version consisted of 39 items. From the original battery, 14 items were retained. These were: (1) Apple, (2) Toyspoon (3) Box of Matches (4) Candle (small) (5) Candle (large) (6) Bicycle Bell (7) Screw Driver (8) Pliers (9) Hammer (10) Nails (11) Wooden block with nail driven into it (12) lock (13) Ball (14) Toy Dog.

The other (modified) substitutes and additions were (15) Batasha-2 pieces (16) Biscuits-2 pieces (17) Red plastic plate (18) Toy Knife (19) Spoon Stainless steel (20) Laddle (21) Cigarettes (22) Packet of cigarettes (23) Bidis (24) Chillum (25 and 26) Coins-2 one large one small (27) Rattle-Wooden (28) Water-melon (29) Banana (30) Glass (31) Tiffin Carrier (32) Piece of Cloth (33) Needle (34) Thread (35) A pair of scissors (36) Earthern lamp (37) Toy Car (38) Toy Duck, and (39) Toffees-2.

"WAIS-R (HINDI, VERBAL) AND WAPIS (FORM-PR) IN DIFFERENTIAL DIAGNOSIS OF SCHIZOPHRENIA AND ORGANICITY"

ANJU SRIVASTAVA¹ AND
T. R. SHUKLA²

ABSTRACT

The present study was conducted to see the diagnostic value of WAIS-R (Hindi-verbal) and WAPIS (Form-PR). The sample consisted of 120 subjects, who were divided into four groups: acute schizophrenics (N=20), chronic schizophrenics (N=20), organics (N=40) and control group (N=40). Subjects were selected on the basis of purposive sampling and groups were matched for age, sex and education. Results suggest that acute schizophrenic group differs significantly from chronic schizophrenic group and organic group. But chronic schizophrenic group couldn't be differentiated significantly from organic group.

Wechsler Adult Intelligence scale is widely used in clinical practice today. It permits ready comparison between subjects and within subjects of a number of different functions or abilities. Moreover from the very start Wechsler introduced his test not only as a psychometric instrument, but as a "Clinicodiagnostic Device" (Matarazzo, 1972). How far this assumption is correct and whether data gleaned from other countries are equally applicable in Indian context were two important motives to conduct this study.

In India, the adaptation of performance scale of WAIS was done by Prabha Ramalingaswamy in 1974. The adapted subtests are Picture Completion, Digit Symbol, Block Design, Picture Arrangement and Object Assembly. In 1983 verbal scale has also been adapted by ICMR Multi-centre project. This verbal scale is in Hindi, and only 4 subtests were taken for adaptation. These subtests are Information, Digit span, Arithmetic and Comprehension. In the present study an attempt has been made to use both the scales together as a

full scale of WAIS and to find out its diagnostic value.

MATERIAL AND METHOD :

Sample : The sample included 120 subjects divided into 4 groups, acute schizophrenics (N=20), chronic schizophrenics, (N=20), organic group (N=40) and a control group (N=40). Selection was based on purposive sampling. Clinical population was selected from the CIP, Ranchi and RMA, Ranchi, whose diagnosis was made by consultant psychiatrist according to ICD-9. The four groups did not differ significantly in terms of age, sex and education. Age range of these subjects was 16 to 40 years. The classification of acute and chronic schizophrenia was made on the basis of duration of illness. Schizophrenic patients having more than 2 years illness were considered as chronic and less than three months duration were considered acute schizophrenics.

Tools : WAIS-R (Hindi, Verbal) and WAPIS (Form-PR) were given to all subjects.

1. Ex. Clinical psychologist, JIPMER, PONDICHERY.

Associate Professor, Head of the Department of Clinical Psychology, Central Institute of Psychiatry, Ranchi-834006.

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Each subject was assessed in two sessions. In first session patient was interviewed, following that verbal scale of WAIS-R was administered while WAPIS was administered during the second session. The gap between two sessions was less than 4 hours.

"t" test was used to see the differences between different groups.

Results and Discussion—Table I shows that control group differs significantly ($p < .01$) with the three experimental groups on VIQ, PIQ and on Full scale IQ. Thus these findings support the observation that in the majority of cases of schizophrenia and organic brain syndrome impairment of intellectual functioning is evident more so in the performance than in the verbal scale.

Further, acute schizophrenic group differs significantly with organic group on the performance scales. But there is no significant difference between chronic schizophrenic group and organic group (Table I). In previous study also reactive schizophrenics have been distinguished from organics (Dewis et al, 1972) But there has always been a problem about differentiating chronic schizophrenics from organics.

Results shows that overall performance of acute schizophrenic group is better

than chronic schizophrenic and organic group. Only on two subtests-Digit span and Object Assembly their score is low compared to chronic schizophrenics. This is perhaps due to increased level of anxiety, poor attention span, increased motor activity or bodily concern of such patients (Wechsler, 1958; Meltzer, 1969, Rappaport et al., 1945).

Chronic schizophrenics tend to have greater impairment of Arithmetic than of Digit Span. The Results show that organic group has shown much reduction compared to other groups. This is due to impairment in cognitive functioning, which involves perception, thinking, memory and attention. They do poorly on the tasks related to these abilities (Thomas et al, 1965). On Arithmetic, Digit symbol and on Block Design, they have scored less as compared to other subtests. This is due to their impaired ability to sustain cognitive performance under time pressure, lack of synthesizing ability and a loss of ability to "shift" (Matarazzo, 1972).

Tables IIa, and IIb show that all the subtests of both the scales, are useful in differentiating control group from experimental groups. In differentiating experimental groups, Object Assembly and Picture completion subtests are not useful but the other subtests are sensitive enough

Table I. 't' values of control group and experimental groups

	VIQ	PIQ	Full Scale IQ
Control vs. Acute Schizophrenic	3.51*	7.32*	3.30*
Control vs. chronic schizophrenic	3.93*	8.75*	4.19*
Control vs. organic group	6.17*	10.13*	5.38*
Acute schiz vs. chronic schiz.	1.39	1.18	1.75
Acute schiz. vs. organic	1.80	2.34**	1.68
Chronic schiz. vs. organic	0.76	1.17	0.61

* $p < 0.01$, ** $p < .05$.

Table II. Showing 't' value of control and experimental groups on verbal subtests.

	Information	Digit Span	Arithmetic	Comprehension
Control vs. Acute schiz.	3.65*	3.52*	2.49**	
Control vs. chronic schiz.	3.85*	2.43**	4.99*	3.93*
Control vs. organic	5.88*	5.17*	6.30*	4.82*
Acute schiz vs. chronic	0.54	1.10	2.18**	6.62*
Acute schiz. vs. organic	2.42**	1.31	1.87	1.77
Chronic schiz. vs. organic	1.51	2.55**	1.14	2.09**
				0.20

*p < .01, **p < .05

Table III. Showing 't' value of control and experimental groups on performance subtests.

	Picture comple.	Digit symbol	Block design	Picture arrange.	Object assembly
Control vs. Acute schiz.	4.82*	6.11*	5.11*	3.52*	8.16*
Control vs. chronic schiz.	3.68*	7.87*	11.72*	4.43*	7.63*
Control vs. organic	5.56*	9.15*	14.12*	5.15*	8.82*
Acute schiz. vs. chronic	0.87	1.76	3.82*	1.17	0.28
Acute schiz. vs. organic	0.86	2.32**	4.78*	2.12**	0.00
Chronic schiz. vs. organic	0.28	0.24	0.88	1.00	0.30

*p < .01, **p < .05

for the purpose of differential diagnosis.

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PORTEUS MAZE AS A MEASURE OF BEHAVIORAL IMPULSIVITY IN SCHOOL GOING CHILDREN

S. S. NATHAWAT¹
SURABHI BORDIA²

ABSTRACT

The present study proposes to investigate the suitability of Proteus Maze as a measure of behavioral impulsivity. 100 children (50 boys and 50 girls) ranging from 9 to 11 years of age were administered Proteus Maze and were also rated by the parents and teacher on items selected from the Conner's Parent Teacher Rating Scale. A significant positive correlation was obtained between Q scores of Proteus Maze and ratings of parents and teachers. Thus the study suggests the use of Proteus Maze in detection of behavioral impulsivity among school going children.

Attention problems in children are widespread but vary greatly in terms of severity, encompassing impulsive children and under achievers in the normal class room, hyperactive children in special education classrooms and emotionally disturbed and neurologically impaired children in residential treatment centres (Meyers Cohen, 1984). Some children never seem to stop and think, and reflective reasoning seems alien to them these are impulsive children (Kendall and Finch, 1978). Whenever a number of response alternatives are simultaneously available and uncertainty as to correct response is high, some children (reflectives) delay responding until the alternatives have been considered and they have a high possibility of being correct. In contrast other children (impulsive) respond quickly without thorough evaluation of various possibilities and consequently make mistakes.

There have been only a few attempts at developing criterion measures of impulsivity. Most of notable is Kagan's development of the matching familiar figure test (M.F.F.T.). Standardized measures as Proteus Mazes and the Kansas Reflectivity Impulsivity scale for pre-schools and a self

control scale developed by Kendall and Wilcox (1979) for children under 12 are also used to measure impulsivity. Douglas and Peters (1979) have emphasized the conceptual similarity between attentional dysfunction and impulsivity. Previous studies by Munroe (1970) and Zuckerman (1983) have emphasized that etiologically speaking impulsivity can be affected by factors such as neuropathology and anxiety.

Proteus Maze is a very important measure of behavioral impulsivity in school going children. It consists of a series of mazes graded in difficulty and standardized for application to children from three to fourteen years of age. It was designed to examine the individual's ability or his tendency to use planning capacity, prudence and mental alertness in a new situation of a concrete nature. Hence, though they are primarily tests of a form of mental ability, yet, because impulsiveness, irresolution, suggestivity, nervousness and excitability interfere most with the subject's success, they are to be regarded as being in large part tests of temperamental capacities as well. Proteus Maze is one of the very few tests which aims very specifically at detecting the temperamental defects that

¹ Reader, Department of Psychology, Rajasthan University, Jaipur.

² Research Scholar, Department of Psychology, Rajasthan University, Jaipur.

interfere with mental ability and thus hamper achievement. The test is such that it maintains the interest of the child throughout the administration. It is relatively easy to conduct, takes comparatively short time, does not depend on language, permits an evaluation of some temperamental traits most important to everyday adjustment and can be widely used with delinquents, deaf and dumb, neurotics and normal children. All this adds to the inherent superiority of Porteus Maze as a test of behavioral impulsivity.

AIMS

1. To study the relationship between Intelligence and impulsivity.
2. To find out the correlation between behavioral impulsivity (measured by Porteus Maze) and teachers and parents ratings of impulsive behavior on some items of Conner's parent-teacher rating scale.
3. To see the effect of sex on impulsivity.

METHOD AND MATERIAL

Sample : A sample of 50 boys and 50 girls was randomly selected from two schools located in Udaipur city. All the subjects were studying in V std. ranging from 9 years to 11 years of age with a mean age of 9 years 7 months for boys and 9 years 11 months for girls respectively (Mean age of the sample was 9.4 years). An overwhelming majority of children hailed from middle class.

Tools employed :

1. Porteus Mazes,
2. Raven's coloured progressive matrices,
3. Eight items on impulsivity selected from Conner's Parent Teacher Rating scales were of two patterns :

(a) Four items of impulsivity for ratings by parents :

1. Excitable and Impulsive,
2. Restless in the "squirmy" sense,
3. Always up and on the go,

4. Distractibility or attention span a problem.

(b) Four items of impulsivity for ratings selected from Conner's Teacher Rating Scale by teacher :

1. Restless or overactive,
2. Irritable, impulsive,
3. Inattentive, easily distracted,
4. Demands must be met immediately—easily frustrated.

Procedure : To exclude children of sub-normal intelligence, Raven's coloured progressive matrices was administered to 70 boys and 80 girls and as a result of which 50 girls and 50 boys of average or above average I. Q. were selected for the present study. Porteus Mazes were administered to each of the children individually as per the instructions provided in the manual. Data was analysed by computing Pearsons' Product Moment Correlation coefficient for different measures.

Table I. Correlation between different measures of intelligence and impulsivity

N = 100 (combined sample of boys and girls)

	Q	CPM	TQ
Q	—	-0.07	-0.19
CPM	-0.07	—	0.32*
TQ	-0.19	0.32*	—

* $p < .01$

Table IIa. Correlation between different measures of impulsivity

N = 100 (combined sample of boys and girls)

Measures	Q	Teachers' Ratings	Parents' Ratings
Q score	—	.36*	.47*
Teachers' Ratings	.36*	—	.36*
Parents' Ratings	.47*	.36*	—

* $p < .01$

Table IIb.

Boys (N = 50)

Measures	Q	Teachers' Ratings	Parents' Ratings
Q	—	.45*	.62*
Teachers' Ratings	.45*	—	.52*
Parents' Ratings	.62*	.52*	—

* $p < .01$

Table IIc

Girls (N = 50)

Measures	Q	Teachers' Ratings	Parents' Ratings
Q	—	.30*	.29*
Teachers' Ratings	.30*	—	.26*
Parents' Ratings	.29*	.26*	—

* $p < .01$

Table III. Significance of differences between mean Q score of boys and girls

t ratio	level of significance
1.05	Not significant

A glance at the result (Table I) will show that there are negative correlations ($-.19, -.17$) between Q score (scores of impulsivity on Proteus Maze) and T. Q. (Intelligence scores on Porteus Mazes) and between Q score and intelligence scores on Raven's coloured Progressive Matrices respectively, although not significant. A positive correlation (.32) between intelligence scores on Raven's progressive matrices and

T. W. ($p < .01$) signify that both are measures of mental ability.

Table IIa show that Q scores of impulsivity on Porteus Mazes correlate positively with the parent's and Teacher's Ratings of impulsivity of the selected items from Conners' Parent Teacher Ratings scale (.47 and .36, $p < .01$). A correlation (.36, $p < .01$) has been obtained between the ratings of parents and teachers. But no significant difference has been found impulsive tendencies between boys and girls.

DISCUSSION

The present study proposes to investigate the suitability of porteus maze as a measure of behavioral impulsivity. An inverse relationship although not significant has been obtained between the T. Q. scores (intelligence scores) and Q scores (scores of impulsivity) on the porteus mazes. This could be accounted in terms of impulsivity irresolution, suggestibility, nervousness and excitability interfering with mental ability. Similarly an inverse relationship between the scores of porteus maze and intelligence scores on Raven's coloured progressive matrices confirms the reasoning that mental performance is interfered by temperamental defects like impulsiveness. A relatively small sample could be held responsible for the unsubstantial correlation.

A highly significant positive correlation has been obtained between the intelligence scores on Raven's Coloured Progressive Matrices and intelligence scores on Porteus Mazes (T. Q.) because both are scores of mental ability. But the correlation is not very substantial because unlike Ravens CPM which is a test of observation and clear thinking Porteus Mazes measures a special kind of intelligence—an intelligence which may be described as "common sense", ability to use foresight in dealing with concrete situation or in avoiding common dangers such as one meets in everyday life. Several in-

investigators such as Porteus (1945, 1950, 1959) Wright (1944), Doctors (1954, 1960) Fooks and Thomas (1957), Purcell (1956), Foulds (1951, 1952), Desai (1965), La Barfa (1965), Erikson and Roeberts (1966), Nathawat (1969) and Gupta and Nathawat (1970) have reported that score of Porteus Maze are sensitive in depicting antisocial traits, criminal tendencies, emotional instability and impulsiveness.

Impulsivity in these children was measured by three different sources. One was the Porteus Maze based on the assessment of penalties for violation of instruction or such errors as crossed lines, cut lines, touch lines, cut corners, wrong direction, wavy lines, lifted pencils etc. Teachers and Parents were asked to rate the children's impulsivity on four point rating items selected from the Coners parent teacher rating scale. A significant positive correlation between the rating of parents and teacher's between parents and Q score on Porteus Maze and between the latter and the ratings obtained from teacher's confirmed and reconfirmed the impulsivity scores of the children. This means that the impulsivity scores (Q score) obtained on the Porteus Mazes were rechecked by having teachers and parents rate the children on the four point rating items. The positive correlation between ratings of parents and teachers ratings confirms Porteus Maze as a sensitive measure of behavioural impulsivity.

But the effect of sex, hypothesized in terms of girls being more impulsive than boys, is not evident. Small sample could be one of the limiting factors.

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GENDER IDENTITY DISORDER : A CASE REPORT WITH TWELVE YEARS FOLLOW-UP

S. C. GUPTA¹

HARJEET SINGH²

S. N. RASTOGI³

Transsexualism has recently attracted the attention of the medical profession on account of more frequent request for change of sex. The most extreme form of gender reversal is primary transsexualism. In this condition, an anatomically normal male knows that he is anatomically normal but nonetheless considers himself to be somehow a female and makes persistent effort to get his sex changed to conform with his gender identity. The presenting complaint of a male transsexual, both primary and secondary, is like this "I am a female soul trapped in a male body". The patient claims this with full conviction although he does not deny the anatomic reality of being a male.

Whether or not the transsexual's feeling of femaleness is truly a conviction is, of course, a matter of interpretation and controversy. The aetiology of transsexualism is not yet clearly understood. Person and Ovesay (1974) in their psychoanalytical study of 10 cases of transsexualism postulate that these subjects have an ambiguous core gender identity. The ambiguity derives from the unconscious fantasy used by transsexuals to allay separation anxiety, the child resorts to a fantasy of symbiotic fusion with the mother which interferes with the normal development of gender role identity.

The hypothesis is that by encouraging unaggressiveness and interest in feminine ways the mother reinforces her son's interest towards femininity. In much agreement to these observations, Stoller (1980) empha-

sizes that feminizing process is rather uninterrupted. The child's femininity begins to appear as soon as any gender behaviour is manifested. The positive reinforcement of all such behaviour that the mother finds graceful, lovely and tender occurs repeatedly. The literature provides illustrative examples of the parents who produce the transsexuals (Stoller and Baker, 1973). The question is that why only a particular male child in the family becomes the transsexual. Mothers report that in infancy these children appear unusually lovable and curdly (Stoller, 1980).

Hamburg (1971) hypothesizes that hormonal factors operating on the foetal brain during the critical period of sex differentiation in intrauterine life might determine the behaviour and interest appropriate or inappropriate to the gender of the individual. Hoenig (1983) in a study of 61 transsexuals found the presence of H-Y antigen in their cells.

However these findings require further confirmation. Therapeutic studies in this direction are remarkably few but quite encouraging. Rekers (1977) observed that behaviour modification in these cases is considerably effective, although the guidelines in some reports are drawn from a more dynamic approach. In addition to reinforcing masculinity and discouraging femininity, the mother also needs therapeutic attention. Sex reassignment surgery as reviewed by Lundstrom et al (1984) gives satisfactory results in only a small number

1. Reader } Deptt. of Psychiatry, K. G's. Medical College, Lucknow.
2. Lecturer }
3. Consultant Pediatrician, Shanta Clinic, Lucknow.

of primary transsexuals who manifest these symptoms at very early age.

CASE REPORT

The case in question is a young man who was brought to Psychiatry Department, K. G.'s Medical College, Lucknow by his parents in the year 1976 while he was 23 years of age and had discontinued his studies a few years ago after completing XIth standard. He possessed asthenic built, 5.6" height, fair complexion and having full physical characteristics of a man. The chief presenting complaint was that the patient believed that his behavioral characteristics and interests are largely feminine and therefore should go for sex change. Since this demand had been persistent for the last 3 years and he was so much obsessed with it that the whole family was at rocks. During this period he seldom went out of home. Psychiatric examination did not reveal any obvious manifestation of psychosis. The case report provides a chronological account of his psychosocial development and also a follow-up data of more than a decade. It may be added during this period of 12 years he had never taken any psychotropic drugs prescribed nor any change was observed in his mental status examination.

Family background

Father, aged 64, is a retired university teacher, introverted and mostly engrossed in academic pursuits and has been rather indifferent to ordinary family affairs. His relationship with patient has been cordial as he seldom interfered with the activities of family members. But, he provided due encouragement to the patient to pursue academic courses and acquire literary and scientific knowledge.

Mother, aged 62, is a post-graduate, housewife, quite extrovert and assertive. For all practical purposes she is the master of home. She is rigid, perfectionistic and domineering and has been remarkably

attached to the patient since beginning. She is however not well adjusted with her husband, highly critical of him and accuses him for having not supported her in pursuing academic career. Her relationship with her daughter-in-law, is also reported to be remarkably strained as she has a fault-finding tendency. She feels that her son's (patient's) problems accentuated because of her daughter-in-law who is a working lady. She herself being old enough to look after the family's responsibilities compelled her to take the help of the patient in managing kitchen and other household affairs. There have reportedly been frequent outbursts between mother-in-law and daughter-in-law on this issue.

Siblings : The only sibling is patient's elder brother aged 37 years, married, an executive in a public undertaking and socially well adjusted. He has been a hostler since class VIII and has a brilliant academic record, not much attached to the patient as they widely differ in their personality make-up and hobbies.

DEVELOPMENTAL HISTORY

Early developments : Normal, schooling started at the age of five years.

7 to 9 years—Lack of interest in studies, stubborn, irritability and poorly adjusted with children outside home. Consulted a psychiatrist for behavioural problems especially beating other children. He was advised hospitalization to which mother did not agree. No other treatment sought.

10 to 14 years : Scholastic backwardness and mother much concerned about his studies. Elder brother who was 2 years older to him was latter shifted to hostel. Change of school took place on account of patient's poor academic progress. Failed in class VIII. It is during this period that patient reports two important things which seem to be related to his liking for being a girl. Whenever he got the opportunity of putting on garments of her aunt

in a seculusive place like bathroom he felt overwhelmed with joy. Secondly, as soon as he noticed increasing hair on his legs especially while attending his school with shorts he felt uneasiness. He would keenly observe the legs of the girls of his age and appreciate their 'silken legs' with little hair.

15 to 17 years—Secondary sexual characteristics mainly moustaches made him quite disturbed. He started remaining lonely and less communicative. Feelings of femininity started overpowering him. So far the family members were quite unaware about the emotional turmoil in this adolescent although he had been experiencing these things for 3-4 years. Suddenly father had to leave job and had to live away from home for 2 years to pursue some academic course and subsequently got a foreign assignment at Kabul. Patient passed class X in second attempt with marginal second division. He attributes his unsatisfactory school performance to being preoccupied with his gender identity. During this period patient was living along with his mother. There was less communication with the elder brother who was residing in a hostel. According to the patient, the latter was getting more attention and affection from mother for being studious and good in studies and consequently he developed feelings of jealousy towards him.

18 to 20 years—Patient joined his father at Kabul along with his mother. Both parents were extremely busy, mother working as a school teacher. For intermediate classes he joined an American School which had coeducation. Patient reports to have become very friendly with the girls and would prefer to sit along with them. Gradually he developed fascination for long hair and also used to apply Bindi on his forehead. On being scolded by his parents for behaving in feminine manner he astonishingly declared himself to be a 'girl'. This

was a real shocking behaviour to the parents and the more they tried to put restriction on his feminine behaviour the more he rebelled. Soon he started writing his name as Mrs. Jenneyfer Brown. Interview revealed that during this period he had developed homosexual relationship with an American boy who was studying with him at 10+2 level. Even now he holds him in a very high esteem, attributing all the good qualities of head and heart.

On account of this severe identity crisis and defiant behaviour his scholastic progress was not satisfactory. He used to devote major time in reading women's magazines, imitating feminine make-up and collecting information regarding women's rights and privileges. During this period he also developed high faith in Christianity much against the wishes of his parents. As such he was sent back to India as a corrective measure.

21 to 25 years : On coming back to India, he was living with his aged grand mother whereas his parents were abroad and brother staying in hostel. At the advice of his family he had joined hotel management course but he was irregular in attending classes as he was feeling uncomfortable in the company of other male students, especially on account of his feminine manners. Since there was no male member in the family and grand mother was considerably old, he had full liberty to dress up himself in a feminine style and also use cosmetics as and when possible. During this period he was mostly confined to home and seldom talked to anyone. In 1976 when patient was 23 years of age his parents returned to India on the expiry of foreign assignment and observing his grossly disturbing behaviour regarding sex they consulted a psychiatrist. Detailed clinical evaluation did not reveal any psychotic process although Rorschach Ink Blot Test had some indication of schizophrenia especially in view of morbid

sexual responses. There was however no definite evidence and as such he was diagnosed as a case of Transsexualism.

It is interesting to note that he was constantly trying to impress upon the psychiatrist his need of sex change and for this purpose he even manipulated by showing a sanitary pad with blood stains implying thereby that he at times gets menstruation. By this time he had also collected lot of literature relating to the technology of sex change and also had much correspondence with various centres of U.S.A. and U. K. for sex reassignment. He was keen upon getting a certificate from the psychiatrist that he was a suitable case for sex reassignment as required by above centres. He was prescribed anxiolytics and antidepressants but he vehemently refused to take any medicine and made persistent requests for hormonal treatment for losing his masculinity which was never approved by any of the physicians. He however continued with his correspondence requesting various agencies of India and abroad for financing him to change sex. He was persuaded for behaviour therapy as well as psychotherapy but he bluntly refused and became quite hostile to everyone who advised him not to go for sex change operation. There was no evidence of insomnia or reality impairment. Soon, father got assignment in a teaching institution in India and thus again the whole family started living together. Family atmosphere was seriously disturbed on account of the patient's obstinate demand for sex change.

26 to 29 years—To divert his attention his father persuaded him to resume his studies. Since it was impossible for him to join any college with this feminine dress and manners, he reconciled to pursue B.A. course as a private student and managed to pass it with 2nd division. Subsequently he was helped to get a job of a physiotherapist in a private hospital. In this job

he was mainly interested in doing massage. This has been his favourite activity for long time. However he could not continue in this job for more than a few months because of his feminine style of hair and manners. The loss of job made him a bit more depressed.

30 to 35 years—Meanwhile through his protected correspondence from various American centres dealing with sex change he was impressed by the idea that a male requiring sex change should take up female nature of jobs (e.g. receptionist or telephone operator) for at least two years. For this purpose he applied at many places but could not succeed. He used to feel much hesitant in writing his original name (Mr.) in the application form as he was all through in his other correspondence addressed himself as Miss Jenney. Anyhow he used to actively participate in kitchen work, decoration of home, washing clothes and similar other domestic work. At the age of 31 years his elder brother got married. From that day onward he became preoccupied about his own marriage with a British or American man. He started using more and more cosmetics and spending most of his time in reading women literature and learning latest designs of female dress, started wearing petticoat or some other loose garments of female nature. Also started putting on artificial jewellery. Used to spend plenty of time in taking bath and looking himself before mirror. Another peculiarity observed in him was that he would often talk very high about the western culture and through reading different books he acquired so much 'knowledge' about the geographical and socio-economic background of America that he thought that he could impress any American in this regard. He used scientific terminology of sex change and his imagery was full of fantastic (pseudo) scientific beliefs e.g. "My organ can be easily replaced by transplantation, a technique in which

all the female reproductive organs could be transplanted in toto without any difficulty and this would make me a beautiful lady. Along with it he starts fantasizing that he would marry an American boy and give birth to a child preferably a female. He also adds that as soon as he succeeds in this long cherished ambition he would like to compete in lawn tennis world championship of women and thus obtain two million dollars or so and become a world fame woman. He wishes to live in America with 'her' husband along with a female child and serving as a most faithful wife.

Physical examination shows that he is a young man with fair complexion, dressed in a clean Kurta and Lungi, clean shaven, no moustaches. His eye brows were not plucked. Examination of testes, penis and pubic hair revealed no abnormality. Neurological examination was normal. Psychiatric examination did not reveal any abnormality except sexual deviation in the form of abnormal sexual inclination and behaviour which centred around his fixed belief that he possesses a female personality.

DISCUSSION

From observations of male transsexuals, Stoller (1980) has delineated a family constellation in which according to him transsexualism originates in the family relationships. He describes a characteristic mother-son interaction within a disturbed marital setting. The crucial factor is an "excessive", blissful physical and emotional closeness between mother and male child, extended for years and uninterrupted by other siblings. According to Stoller (1968), the parents usually lived in loveless, essentially sexless marriages and without any move towards separation or divorce. The mothers are generally unhappy with perhaps masked depression and a deep sense of emptiness whereas the fathers are emotionally detached, passive and/or feminine

and are often absent particularly during early years of the development of the child.

Since Stoller has done maximum work in this field it would be appropriate to critically analyse the early childhood experiences of this patient in view of the above mentioned observations. He is reported to be remarkably stubborn, picking up quarrels with other children, especially with boys, showing lack of interest in studies and so much so problematic that the parents have to consult a psychiatrist at the age of 8 years. Extreme closeness between mother and child during the early childhood as reported by Stoller is not evident in this case. There is no doubt that his mother was quite concerned about his poor scholastic progress and used to spend plenty of time to make him to do his school work but this is again during the end of the childhood i. e. around 8-10 years. There is no doubt that his father was not so much concerned about his studies or for that matter he was not actively involved in the family affairs. For mother, bringing up both children (patient and his elder brother) was the motto of her life, especially when there was problem of marital adjustment with her husband. It was only when patient did not take due interest in his studies and had gradually shown social seclusiveness during the early adolescent period that she allowed him to participate in kitchen and other domestic work. Since he was the only helping hand to her, he became physically as well as emotionally very close to her. Till then there was no warning signal of transsexuality and according to patient's mother she became aware about this sexual identity problem when patient was almost 20 year old. As such the present case is not in conformity with Stoller's hypothesis of extreme mother child closeness during early childhood.

Another important observation put forward by Stoller (1980) is that of the boy's beauty and grace-the only biological

factor playing an important contributory role in the aetiology of transsexualism. General physical attributes as well as complexion of this patient are almost average and by no means he possesses any distinguished attractive features. However, he seems to have perceived himself quite 'good looking' during the late years of his adolescence, that is, soon after joining a cosmopolitan city abroad where he developed passive homosexual tendency and also hatred towards his own male organ. It is remarkable that he has never masturbated and if we trust in what he says, not only this he shuns seeing his own organ. He spends plenty of time in bathroom or before dressing table, sometimes 2-3 hours at a stretch keenly observing his dress, manners, appearance and make-up.

The question is whether it is obsession or personality disorder because psychotic process is firmly ruled out clinically as well as on Rorschach Test. His performance on SPM shows his intellectual level being above average. He has not shown any sign of psychosis during our follow-up period of 12 years. Never taken any psychiatric treatment during this span of more than a decade. Further, he extends full cooperation and even prepared to undergo any kind of stress or physical discomfort provided the therapist is doing so to help him out in achieving his cherished goal of sex change. He often talks of nothing but surgical intervention and tries to impress everyone including the specialists with his pseudo scientific knowledge of sex change. He puts forward his views in a very forceful manner and be-

comes aggressive if anybody tries to discourage him or challenge his knowledge. During discussion on matters of sex or women liberation he wants to be the focus of attention and gives little opportunity to others to speak. Undoubtedly, he is emotionally demonstrative, manipulative and possesses lying tendency but all these personality attributes are associated with his obsessed thought of getting his sex changed.

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BOOK REVIEW

Mental Stress : The Modern Killer : by C. R. Trivedi ; Ahmedabad : Rasik Thaker (1987) , pp. 102, Rs. 16.00

Stress is one of the most discussed topics of present times. There has been recently an abundance of literature on the subject and in this small concise book the author has tried to cover up major relevant areas of stress, especially to disseminate this knowledge in the general public.

The book comprises eleven chapters and precisely deals with neurophysiology, general adaptation syndrome, role of limbic system, personality factors, life events and psychosomatic disorders. He has also discussed role of Yoga and tried to formulate the preventive aspects of stress at the individual as well as community level. The areas covered are extensive but they seldom reach the depth to attract the attention of specialists.

On the whole, it is an appreciable effort by the author and it is hoped that the book would be of considerable use to the lay public. The author should have been more careful in citing references and presenting them in proper format.

PROF. A. K. AGARWAL.

LETTER TO THE EDITOR

Advancement of Behaviour Therapy Through Local Study Circle

Dear Editor,

I wish to express my views with the practitioners of behaviour therapy as how to promote behaviour therapy in India and enrich their own expertise with minimum resources by establishing local behaviour therapy study circles.

The Varanasi Behaviour Therapy Study Circle is an example in this direction. Dr. Ratan Singh's contribution deserves appreciation. Only selective people join who agree to abide by the general rules given below :

It is voluntary organisation. The only precondition is that each member has to present a case treated by him/her pertaining to behaviour therapy. Each member participates in discussion, reinforces, gives feedback and provides healthy criticism by suggesting what else could have been done to help out the individual. Monthly meetings are regularly held and the venue, time and speaker for the next meeting is decided apriori at the end of the meeting. It is considerably informal and friends as well as family members may also join.

What's so great about it? Well, it is a modest, cost-free way of uplifting and spreading the torch of behaviour therapy and success or failure is documented impartially. Misrepresentation or misreporting of behaviour therapy is discussed in the cohesive group and steps are taken to popularise the efficacy of behaviour therapy.

SANDHYA SINGH KAUSHIK
Varanasi

Forthcoming issue of IJCP :

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NOTES & NEWS

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Benefits of Academy membership generally include certificate, listing in IABMCP's International Directory, periodic newsletters, international conference calendars, conferences, workshop at reduced tuition, professional publications, travel benefits, research and advisory services, etc.

N. N. SEN MEMORIAL AWARD 1988

As notified earlier the last date of submitting articles for the award was 30th May, 1988. The Executive Council constituted the Award Committee which comprised of Prof. G. G. Prabhu as chairman and Prof. K. V. Kaliappan and Drs. S. K. Verma and T. R. Shukla as members of this committee. Since the number of articles submitted for this purpose is insufficient the award has been deferred for this year.

19th Annual Conference of Indian Psychiatric Society—Central Zone is to be held at Mental Hospital, Agra, on 15-16 October, 1988. Contact S. K. Bhutani, Organizing Secretary, Senior Supdt., Mental Hospital, Agra-282002.

3rd National Congress of Hypnosis and Psychosomatic Medicine sponsored by Indian Society for Clinical and Experimental Hypnosis and Indian Medical Association is to be held from 28th to 30th November 1988 at A.I.I.M.S., New Delhi. For enquiries, Ms. G.K. Sahasi, Organising Secretary, Deptt. of Psychiatry, A.I.I.M.S., New Delhi-110029.

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Under the title of the paper names of the authors should be given. The present appointment and postal address should be given in a footnote on the first page of the article. An abstract of one small paragraph should be given at the beginning of the article.

Illustrations are much more expensive to reproduce than text material. They should, therefore, be used only where absolutely necessary. Drawings and charts should be made in black ink on white paper. Authors have to pay for the charts, drawings and large number of tables.

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Kumar, U. (1975). Aggression—A clinician's viewpoint. *Ind. J. Clin. Psychol.*, 3 : 9-16.

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