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IDENTIFYING SOCIAL WORK POTENTIALS THROUGH PROJECTIVE TESTS

AN EXPLORATORY INVESTIGATION



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PREFACE

This monograph is the first part of an exploratory study to investigate qualities necessary for social work and to devise suitable tests or to use existing psychological tests with necessary modifications. It discusses significant factors and qualities and reports the use of two Projective tests, the Sentence Completion Test and the Thematic Apperception Test, on a batch of post-graduate social work students, previously selected by interview and an autobiographical analyses. Detail statistical analyses of the data of psychological tests along with further evidence will be presented in subsequent monographs.

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THE NEED AND NATURE OF THIS STUDY

The Government of Bombay Vocational Guidance Bureau had initiated various investigations designed to assist Professional Schools (Engineering, Medical, Commercial Art, Architecture, etc.) in selecting their students by means of suitable standardized Psychological Tests. In June 1954 the Faculty of Social Work, M. S. University of Baroda requested the Government Bureau to conduct a study towards evolving suitable psychological tests in selecting their students. Though initially the work was carried out by the Government Bureau, with the inclusion of the present investigator on the staff of the Mental Hygiene & Psychiatric Clinic in Nov. 1954, the project was continued by the Faculty.

The source of this study lies in the need to adopt a more sound admission policy in the Schools of Social Work. On the one hand, the National Development Programmes requires a fairly large number of trained Social Workers to man the various agencies and execute and operate the welfare plans and projects. In view of the present dire need, the country and profession can ill afford the loss that would arise if a good worker was unfortunately barred from entering the field, by a system of selection which though entirely based on good intentions had many imperfections. Nor can the needs of the country be met by workers who are not, for a variety of reasons, able to do the work. On the other hand the schools stand by their policy of having a restricted number on the rolls, as social work training is primarily a training in human understanding and self-discipline, requiring intensive work of individual attention and

supervision, so that the student could integrate class-room theory in practise in the field, as well as understand his own reactions to life situations. Since a social worker basically is dealing with people under emotional stress, whether the origin of the stress is interpsychic or intrapsychic, a high degree of stability is required of the worker for consistent performance. This responsibility to suffering humanity places a heavy premium on the educator to select and train workers of the right calibre. Apart from a very important fact that a failure could demoralise and increase the stress of the student, a fact which cannot be neglected from the point of view of the mental health of the student community, the high cost of the present system of training makes it essential that wastage of money as well as the teachers' time be reduced to a minimum by selecting only those best suited to profit from such a training. As Towle(47) puts it.... " we are all concerned to afford the educable learner, the student whose professional choice is realistic in terms of his ability and disposition, an educational experience which will foster maximum development for competent performance of his professional function and for creative activity when there are these potentialities. "

The phenomenal increase and rush of applicants necessitates a selection system, dictated by justice and fair play, which provides each candidate all chances of gaining an admission on merit alone.

It has been recognised that intake goals are related to training goals. As expressed in an article by Vakharia(75) which covers the discussion of the Seminar on Training in Social Work held at Baroda in Feb. 1953 and attended by representatives of national Schools of Social Work and foreign experts, it was asserted that " training at no stage

could be separated from the admission policy of the School of Social Work." All the schools have been aware of the problem and are attempting to devise suitable methods. A few have initiated psychological tests, the results of which have not yet been published.

PRESENT SYSTEM

At present, the screening of candidates in the Faculty of Social Work, M. S. University of Baroda, is done with the help of following instruments :—

- (a) Application Form.
- (b) Biographical Sketch.
- (c) Interview.

OBJECTIVES OF THIS STUDY

The investigation therefore sought to answer the following questions :—

- (1) What are the qualities or factors necessary for Professional Social Work.
- (2) How well can these qualities or factors be predicted as indicative of potentials in candidates through Psychological Test responses.

This preliminary report is concerned with the discussion of factors necessary for social work and the use of only the Sentence Completion Test and the TAT as predictor variables.

DESIGN OF THE STUDY :

The steps involved in this research could be briefly itemized as follows :—

- 1. Obtaining information.
- 2. Formulation of variables.
- 3. Selection of appropriate tests.
- 4. Try out of preliminary test forms.

5. Analysis of preliminary test forms.
6. Preparation of revised forms.
7. Administration of tests for validation.
8. Determination of tests validity.

OBTAINING INFORMATION

The formulation of profitable hypotheses as to qualities and factors that account for success and the tests required to measure them, calls for an intimate knowledge of the school requirements, the nature of duties and the job demands. The foundation for any good selection programme, is a background of information about the above aspects and a penetrative analyses and organisation of the material. It is towards this end that the following sources were tapped.

1. Interviews with Senior Staff Members :

These interviews were held to obtain information about the nature of work and the qualities required for effective performance in the field.

2. Content analyses of the Field Work Criterion :

The Faculty had worked at a criterion which students had to meet in their work. This relates to minimum goals they had to achieve at a given point *i. e.* various terms.

3. Supervisor's Field Work Report :

These provided valuable information in as much as they expressed statements of behaviour regarding performance and adjustment in the field work agency.

4. Staff Members' rating of qualities deemed essential for Social Work :

A descriptive list of 80 traits were prepared and rated by staff members on a four point scale.

5. Discussion with other Psychologists :

Consultations were held with workers in the field of guidance, recruitment, selection and test construction,

regarding various methodological problems involved in a research project of such a nature.

6. Survey of the literature :

The material surveyed were :—

- (a) Qualities required for professional social work.
- (b) Prediction studies involving use of psychological tests.

QUALIFICATIONS NEEDED

A Review

Reviewing material on selection of students to Social Work Schools, Towle (74) observed that we look for individuals with the following potentials :—

“Students who will have the capacity to think objectively in situations which involve them emotionally ; individuals, therefore who will be able to make learning a conscious process as a means to regulating their own need. We value also a wide range of perception and sensibility, as shown in the ability to bridge the gap between one's own experience and another's, through being able to consider the experience of others imaginatively but without distortion.

“ We want students who can sub-ordinate immediate goals to remote goals, without becoming more than temporarily task-centered. We want individuals who are sufficiently confident that they can absorb discomfort and anxiety so that it motivates learning or at worst impedes it only temporarily.

“ We value those who can identify with and relate to those who impose demands, who also can relate to different people differently rather than so largely in terms of their

own compelling needs that their responses are stereotyped and without nice reference to the needs of others.

"We want to select students who can form influential relationships without loss of individuality and vitality. We consider this highly important if the profession is to have creative thinkers and leaders.

"For this the inclination to change must be deep and abiding, rather than transitory in the sense of a strategic adjustment to gain an immediate goal, a striving for status instead of for something in the accomplishment of which he is willing to invest himself. This implies readiness not merely to relinquish old authority dependency ties but also readiness to form new relationships. Among these the professional helping relationship demands a sustained response to the needs of others, ability to give and to withhold, to assume responsibility and to delegate it, and to use authority without personal need to be authoritative.

"And finally, we want individuals who are ready to commit themselves rather totally to the profession, who can come to have a sense of vocation, in contrast to the individual who wants to give a measured part of himself and hence seeks an occupation to which he gives definite hours and assumes specified and limited duties."

Pooling information from various sources, it was evident that effective performance in the field of professional social work required or called for a high integrative capacity, a resultant of a number of interrelated qualities. The development of this integrative capacity in a training programme would consequently have to take into account these interrelated factors. Towle (74) further quotes very useful comments of Dr. French regarding the integration of

behaviour for application in goal directed behaviour of professional learning.

"Goal-directed behaviour is motivated by needs and hopes. A person's needs and unsatisfied desires put him under pressure which spurs him on to activity ; but unless he has hope of being able to achieve a desired goal, it will be difficult for him to subordinate his activity to any consistent purpose. In order to achieve a goal it is not enough just to do something. One must also know what to do. Purposive behaviour must be guided by insight into how to achieve one's goal ; and even if he knows how to achieve his goal, he must also subordinate his activity to plan. Too intensive desires or anxieties may interfere with this subordination of behaviour to purpose ; if a person's unsatisfied desires or anxieties are too great, he may be thrown into a panic and become quite incapable of concentrating his effort on a sustained purpose. In order to subordinate his activity to purpose he must have an "integrative capacity" adequate to absorb and channel the pressure of his unsatisfied needs and anxieties which constitute his integrative task. "Integrative capacity" we define as the capacity of the ego to withstand and master pressure and in particular, to channel the pressure of unsatisfied desire into effective goal-directed effort. This "integrative capacity" has its chief source in a person's confidence in being able to execute his plan and achieve his goal. Such hope is based in past successes and in opportunities perceived in the present. And from this it follows: (1) that those students who have a background of past success to give them confidence in their ability to master new tasks will be the ones who will be best able to overcome the difficulties inherent in the educational process ; and (2) that the difficulties in the educational programme

should be judiciously dosed so as to make it possible for the student to build up his confidence progressively by ever new achievement and to protect himself from the disintegrating influence of disillusioning or repeated failures."

It would be interesting to note here that the Woodward Commission on Social Work stressed the following qualities:—

1. Intellectual capacity.
2. Academic achievement.
3. Motivation.
4. Capacity to form relationships.
5. Capacity for growth and change.
6. Adaptability.

Similarly the Berengarten group listed the below factors :—

1. Possession of good intellect.
2. Disciplined mind.
3. Healthy motivations.
4. Ability to form relationships.
5. Ability to grow and change.
6. Ability to be flexible.
7. Ability to view life realistically but without deep hostilities.

Significant Factors and Qualities :

A DISCUSSION

From the above and other sources, the following variables were found to be of importance for the integration of behaviour and for Social Work Education.

1. Healthy Family Dynamics :

It is an environment of emotional security that nurtures and facilitates healthy ego development. When there has

been a relatively positive identification with a firm and loving father and mother figure, an individual works congenially, and co-operates with other people. He regards and helps to maintain group co-hesiveness as a norm. The benign parental relationship makes it easier to handle ambivalent feelings which may have arisen because of parental discipline and training. Such an environment provides the ego supports to utilize one's capacities and potentials, to face stressful events and experience the feeling of being successful. Such an individual avoids hostility or immature dependency and learns to think objectively. On the other hand, where there has been prevailing a BFA (Basic Family Attitude) of severe resentment, arising from such causes as a dominant possessive mother or a dominant aggressive father, the individual's integrativeness will be affected by his competitive drive. An individual brought up in a disruptive family setting would tend to achieve security, by surpassing and dominating others, by being a rebel against authority, by being blunt, haughty, challenging, obstinate and domineering. He would tend to expend his energies by his exhausting compulsive efforts, driving both himself and other people. The emotional satisfaction, in doing a job well, will be very negligible. Where again the BFA is derived from an emotional fixation to, and over-dependence on the mother figure, one meets with an individual who leans on a group, attempts to over-please, capitalizing on his helplessness and over-sensitiveness but so self absorbed that he is not aware of other individuals or group goals. He either turns out to be an isolate, a shut-in or an immature dependent personality, characterized by self depreciating excuse making helplessness.

The import of early ego development for professional education has been better described by Towle.(74)

"The adult who was the child with predominately positive experience and who now is motivated largely through love and hope will have a well developed ego..... thus he will have developed a capacity to love and be loved without marked conflict and anxiety over the implied dependency and demands. He is motivated through his love of others, his obligation to others and his self-regard, his obligation to himself. He will have developed also the capacity to live and let live. Thus he will be free to be aggressive for survival, but because there is minimum hostility in his aggression he will let others do likewise, for he has little fear of retaliation or loss. He will have developed a capacity to renounce many things in order to possess other things more securely and fully. Thus his striving for gratification are oriented to reality. His conscience is a true one, in that it is his own, that is, an integral part of his personality, so that following its demands is an affirmation of the whole self. His intelligence can be used to the utmost, and his aspirations will tend to be commensurate with his intellectual abilities. He will have attained an inner equilibrium, a moral, spiritual stability, which stands him in good stead against confusion and disaster. Without anxiety, he will accept responsibility commensurate with his capacity. When the responsibility is so great as to produce anxiety, it will motivate him to seek solutions rather than drive him to purposeless activity or into inertia. He will accept the stress of life with equanimity, even with a kind of a eagerness sprung from the sure knowledge that somehow or other he will have what it takes to carry through. If the stress is excessive for his capacities and escapable, he will protect or defend himself satisfactorily. Guilt not being great he will be able to compensate. Furthermore, he will have

the wherewithal for compensation, and because his need is not excessive his compensatory drives will not be extreme. His projections will be fragmentary, his regressions and his fantasies temporary and self-healing. His primitive urges unacceptable to the ego will be handled more through sublimation than through regression, particularly if the circumstances of his life permit sports, hobbies, intellectual pursuits and creative activities. Identification as a means to learning will not be so deeply involving as to obliterate self-identity. Under traumatic conditions, when used as a defence, the ambivalence created by negative affect will not be so great as to create a problem in learning. He will not be deeply tied and submissive through hostility or driven to extreme expressions of negative affect. In relation to unattainable goals he can give up without loss of face. In short his experience has been such as to develop highly the integrative and executive functions of the ego."

2. Warm Interpersonal relations :

The development of an integrated personality is also a function of warm interpersonal relations. It is in this positive situation, of give and take, that one becomes less ego-centered and more group-centered, developing a basically genuine warm personality. One then enjoys friendship by contributing towards it, tends to be sensitive to other people, co-operates and works in a team. Harris (28) refers to this team-mindedness as "not a compromise between the individual and the team but as a creative polarisation of both."

In a profession like Social Work where the social interaction is very high, an individual working in the field must possess the basic warmth for people.

3. Positive Authority Adjustment :

Integrative capacity is further enhanced by forming healthy positive relationship with supervisors and authority figures. In this relationship one learns to make the ways of others his own so as to use them freely rather than abjectly. In contact with teachers one forms influential relationships wherein one's "identity modified but not obliterated goes native without loss of that individuality essential for creative work." (74)

4. Motivation and Drive :

Kelly (42) in the studies on selection of Clinical Psychologist, remarked that "....findings suggest that in selection of professional training, more attention might well be given to the role of motivation. Perhaps at the level of graduate training, we need establish only a minimal cutting score on tests of intellectual aptitudes ; beyond that part, the strength of motivation and the absence of conflicting drives may be the determining factors in success of professional training and even in the conduct of professional duties." Again the well-known Moss studies of medical students were not found satisfactory because they tried to measure intellectual ability and aptitude and did not take into account the essential aspects of behaviour which are of critical importance. In this context Dr. Brosin (5) commented that....."competence to study medicine and practice successfully involves many organisational properties which are not unitary functions and are related to the more obscure, unconscious aspects of personality. It is desirable to know how well the candidate is motivated, how economically he handles his anxieties under stress, the way in which he relates himself to people, how much energy he has for genuine productivity in contrast to neurotically driven competitiveness."

Dr. French (22) remarks that the "integrative task is heavy or light depending on the depth and strength of the needs and wishes which motivate the individual's goal-striving and the extent to which they give rise to fear or hope. The size of the integrative task will vary from individual to individual in relation to his motivation and the degree of hope which sustains him, thus enabling him to absorb anxiety and discomfort and in relation to the nature of the educational opportunity and the concomitant social circumstances."

In motivation analyses for an integrative capacity, three aspects have to be taken into account : (a) strength and durability, (b) the quality of the motivation and (c) the relationship of motivation or aspirations to actual capacity. Previous studies on motivation [O.S.S. 54] have found that "only sustained motives well-integrated with the person's prevalent needs and attitudes and not undermined by opposite tendencies could be relied upon to ensure persistent effort in the face of discomforts, frustrations and boredom.....strong motivation was necessary to prevent people from turning bitter or cynical under frustrations."

However, if the motivation is strong but not of the right quality or type it tends to reduce the individual's functioning capacity, in as much as there is a difficulty in meeting the job demands in interpersonal relationships or in adjusting to authority and agency rules and regulations.

Again job demands determine the tempo and the rate at which an individual must accelerate or mobilize total energies. An individual who has to work beyond optimum tempo or expend more energy than he can spare, will soon be unstable. Thus staff members of the Faculty have remarked that if the motivational aspirations of a student

is grossly separated from his functioning level, great effort was required and this tends to lower his integrative capacity. This happens again when there exists a very wide gap between his actual or potential capacities and the level demanded by the school. Harris(28) in another content reporting on his experience of Officer Selection comments that "....what struck one forcibly in officer selection was the number of men whose maladjustments were due to attempting tasks well above their optimum level; driven either by an inner urge to compensate for some insecurity or by parents compensating for their own frustrations."

The tendency therefore to regard strong drives and high motivation as positive aspects without considering the quality or direction of the drive and its relationship to capacity, often leads to errors in prediction. This could best be illustrated by the comment of the O.S.S. (54) staff in another content: "the primary reason for the failure in the field of our over-rated candidates was the fact that their strong drives was primarily ego-centric and turned them to pursuits that were often opposed to the interests of the organisation."

Various motives have been found to promote students to take up social work.

1. Patriotic (do something for the nation).
2. Participation (in the national and community development scheme).
3. Sense of duty to underprivileged, suffering humanity.
4. Social status and prestige of the occupation.
5. Monetary.
6. Unemployment.

7. Escape from more difficult undesirable work or occupation.
8. Solution of personal problems.
9. Personal development (maturity).
10. Ability to have done previous related social work jobs, (voluntary or paid) either in groups or with individuals.

These types of motives could be briefly grouped into the following broad categories.

- A. Motives expressing socio-centric ideals.
- B. Motives expressing ego-centric tendencies, status, prestige, and financial.
- C. Motives expressing insecurity such as escape motives.
- D. Motives expressing self-confidence and positive self-feeling.

It has been found both here, and in previous studies, O.S.S. (54) that motives expressing self-confidence and positive self-feeling and genuine socio-centric ideals were positively related to integration whilst ego-centric, status, prestige, financial and insecurity and escape motives were found in candidates whose performance was on the whole below par.

The interrelatedness of motivation with other aspects of personality has been brought out by O.S.S. report. " Motivation is a function of underlying emotional attitudes and needs and without stability in the underlying structure, motivation no matter how high it may be in the moment will not be of sound quality or of an enduring nature. Conversely, if a man's motivation is sound and realistic, there is reason to believe that his emotional dynamics are relatively stable. "

Good Insight :

The development of an integrated ego, professional maturity and the helping process requires possession of an insight into one's own personality. This implies an ability to be aware of one's own strengths and weakness, an adequate estimate of one's ownself and an understanding sensitivity of self which enables one to perceive the needs of others. Thus an individual who is not aware of his own strengths and weaknesses would experience difficulty in viewing the situation objectively. His projection of the situation would tend to be subjective and his approach unrealistic.

Where an individual's estimate of himself is immature he may tend to set his goals rather too high or too low. This would accordingly cause him to over-tax his capacity and he would then tend to react irrationally or be demoralized.

Again for the helping process it is necessary first that an individual be aware of his own inner feelings and understand his own problems and view them with some degree of objectivity. Unless one is able to do so, one would find it difficult to understand the needs of others. In the helping process the worker meets with clients when they are in a state of emotional stress. In dealing with them he must have the ability to feel with them. But in relating to them with sympathy and understanding he comes close to feeling like the clients. This tends to bring about a sort of emotional involvement and consequently frustrated feelings, stemming from a sense of helplessness if the situation is quite severe. The worker rather than being helpful, may experience resentment at himself or the client who was responsible for this discomfort.

On the other hand, an individual may over-react emotionally with a client through exaggerated emotional response of identification, thus failing to understand the clients' problems. Thus insight is necessary to understand one's own emotional responses in order to regulate the same in the helping process. In the learning process, Sidney Berengarten(3) remarks that "the development of such self-awareness becomes a self-discipline that results in a more purposeful use of technical knowledge and personality with which to sustain others and to motivate them to use their own ego-strengths and resources in the resolution of psycho-social problems. This learning objective is considered essential for all social workers whether in treatment or in non-treatment working relationships."

Emotional Stability and Resources :

Of crucial importance for over-all effective functioning in the field of Social Work, is the underlying dynamics and structure that characterizes the frame-work for Emotional Stability. In all walks of life, Education, Medicine, Business and Industry, one comes across individuals, otherwise gifted with skills and capacities, whose operating efficiency is lowered by their emotional structure. Such individuals lack a superior dynamic structuration of their personality and easily "fall apart". They remain over-grown problem children, are frequent "risks", involving the organization and individuals they come into contact, in public scandals. A resilient and stable adjustment to the major problems and situations of life, require positive acceptance and observance of social and ethical standards, integrity, self-discipline and a sense of responsibility.

In the field of Social Work, where a high sense of responsibility is required, to individual clients and to the

agency, where there exist a professional code and ethics as in the field of Psychology and Medicine, the ability to manage emotions which might otherwise disrupt behaviour, is imperative. The potentials of this ability to govern undesirable emotions as indicative in ego-strengths, must be carefully searched for, if the capacity for integrativeness is to be evaluated.

Stress—Tolerance :

A corollary of Emotional Stability is the characteristic termed stress-tolerance. Harris (28) refers to this factor, as a normalizing function *i.e.* "the active and continuous capacity not only to resist the deteriorating effects of stress but also to return to normal when these have passed." Henry (35) proposes that "all situations present certain inherent stress and that the manner of adaptation to stress constitutes the variable of greatest importance." The focus then in evaluating this factor is how one copes with frustration, since "successful adjustment to living is largely the constructive direction of one's reaction to such frustration." (28)

Another very important dynamic attribute that plays its part, in providing the temperamental sturdiness, has been called morale. It is a resultant of normalizing and unstabilizing experiences that functioned in the past. If an individual has been a victim of consistent failures and frustrations, he may be beaten before the start and his actual capacity may never have a chance for expression. This vicious circle of lowered morale and diffidence by frustrations, failures, isolation and poor health, especially if it has gathered momentum, is not easy to reverse. Likewise a virtuous circle of progressive successful achievement generating positive self-feeling, predisposes an individual to attack new tasks with courage, confidence and hope.

In Social Work training, emotional demands for learning and performance are great. There are quite a number of areas which present stumbling blocks in students' learning. Authority adjustment, dependence, sexual material are some characteristic problems arising in supervision, case work and group work. The emotionally charged content of such material does arouse stress and anxiety in a student. However it is when anxiety is not excessive that the individual can hope to attain his goal. The ability to handle anxiety would depend on the individual's stress tolerance, morale, and ability to seek help from his supervisor.

Adaptability and Flexibility :

Integrativeness requires the capacity to change and assimilate the same so as to make it part of the personality. Since professional education presents hierarchy of goals and a set of values, this requires the ability to be flexible and have an adaptable personality. The normal student has to be a flexible learner, able to shift intellectually and emotionally from the general to the specific or the specific to the general. He must relate theory with actual experience in field work practice.

Flexibility involves more than recognising change. It includes recognition of complexity and confusion, an ability to conceive new relationships and reordering of events. The importance of this factor in actual Case Work or Group Work practice can be realised from the constant restructuring and re-evaluation of a case or situation, required in the light of new facts, elicited as the case progresses. A social worker who tends to be rigid would probably make more decisions that conform to strict nosological classifications and thus lack the diagnostic sensitivity to evaluate each individual case. The adherence to precedents and stereo-

types would be a serious hinderance in the consideration of individual case problems.

Intellectual Effectiveness :

This factor is sometimes discounted on the score that personality factors are required rather than intellectual skills. Berengarten (3) remarks that "rich professional performance in any field of social work requires high ability to engage in abstract reasoning, to think analytically and conceptively, to formulate mature judgements and to express oneself with clarity. Intellectual curiosity and capacity for imaginative and creative thinking are as much needed in social work as in other professions, if the boundaries of our knowledge and skills are to be advanced."

SELECTION OF TESTS

Personality Inventory vs. Projective Tests

With the formulation of qualities or factors, the need of choosing suitable tests with modifications or devising new tools to evaluate them arose. It would be worthwhile considering the type of tests that would be useful for the project.

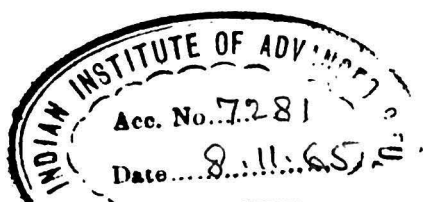
Other investigations with ordinary personality tests have been reported to be a failure. Adkins, (1) a former chief of the U.S. Civil Service Commission Test Development Section, remarked, that little or no reliance could be placed on paper and pencil tests of personality. Similarly, Ellis, (16, 17) in a comprehensive review on the value of personality questionnaires concluded that group administered paper and pencil personality questionnaires are of dubious value in distinguishing between groups of adjusted and maladjusted individuals and that they are of much less value in the diagnosis of individual adjustment of personality.

Maller(47) has summarized most of the disadvantages of the self-descriptive tests of temperament. These questions in such tests are also easily answered in a manner which tends to put the candidate in a favourable light. Jurgenson, (40) a Personnel Director remarked " The typical ' yes-no ' type of personality questionnaire is considered to have too many defects to warrant general use. "

This apart, one of the chief drawbacks of the usual paper-pencil tests lies in its failure to view the individual as a whole. As Murray and his associates (54) have pointed out ; " To identify a man as an introvert for example, gives us no information as to his energy level, his fluctuations of mood, his enduring emotional attachments, his membership systems, his political ideology, the pattern of his erotic fantasies the strength of his conscience, his dilemmas, his intelligence, his initiative and resourcefulness, the degree of his self confidence, his dominant aims, the level of his aspiration, his chief abilities, and a great many other important components."

Brower(6) postulates four major dimensions along which the projective test could yield information.

1. The maladjustment factor: The blind spots which hinders an individual's self-awareness and colours his reaction to superiors, colleagues and sub-ordinates.
2. Stress tolerance factor: The extent to which an individual can handle such things as frustration, fatigue, boredom, anxiety and other stress or pressures.
3. The flexibility factor: The ease with which one can shift his ideas, attitudes and his motor behaviour from one task to another on the job with little or no loss of efficiency.



4. The capacity utilization factor : The extent to which one has learned to use his endowments and skills on the job without expending a great deal of energy.

Taking into consideration the above facts it was found that the best approach would therefore, be to use methods that were difficult to "beat", rather than the usual personality inventories, as well as tests that would enable us to have a total picture of the personality. The only solution to this problem could be had by resorting to projective tools. An extensive system of selection on the lines of the W.O.S.B. or the O.S.S. style would not be feasible on the lines of practicality. Positive findings with projective techniques as reported by Henry, (32, 33, 34, 35,) Brosin, (5) Kavruck,(41) Morgan, (49, 50) Stein, (69) Sohan Lall (66), prompted the use of projective tools in the project.

The Sentence Completion Test :

Discussion of previous studies.

The Sentence Completion Test is an evolution of the Word Association Test used by Jung, Kent and Rosonoff,(44) and others. However the method was initially employed to investigate higher mental process by Ebbinghaus in Germany and later by Frabue and Kelly. It was Payne and Tendler who used it for studying personality factors. Rohde and Hildreth (56, 47) have issued a variation of forms. The test subsequently has been extensively used during the war by the O. S. S. (27, 54, 57, 69) in Army Hospitals(37) in the Air Corps (25, 72, 73) as a screening device and after the war in the Veteran Administration Clinics.(23)

Among student populations, Hadley and Kennedy(26) compared performance of 157 college students on the Sentence Completion test and academic success. The stud-

ents who had achieved according to their abilities had less conflicts than those students who had underachieved. A critical ratio for the difference between the mean scores of the two groups was found to be significant at the .04 level.

Similarly the findings of Costin and Eiserer(11) did indicate rather definitely that the test could be a very helpful device in discovering student attitudes towards various phases of school life. Wilson(75) likewise found favourable results in discriminating the well adjusted and maladjusted students, using the Sentence Completion tests. Rotter and his colleagues reported a corrected reliability co-efficient of .84 for men and .83 for women (corrected by the Spearman Brown-Prophecy Formula). The biserial validity co-efficients of .62 for men and .50 for women was obtained. The test was employed in an attempt to screen maladjusted college pupils. Churchill and Crandall(13) obtained a biserial correlation of .42 for women and .57 for men. Barry(2) reported a correlation of .67 in a study of 38 pupils.

Using Jenkins Index of Selective Efficiency, *i. e.* the ability of the test to accept and reject individuals rated high and low, Kavruck(41) in his study of Overseas Employees reports a Selective Index of .560.

Examining the efficiency of the test to accept and reject individuals in the record groups and those rated high the index of selective efficiency was reported .475. The test retest reliability using Arrington formula was .850 and interscorer reliability was reported to be .946.

Burwen, Campbell & Kidd(7) report their efforts to use the Sentence Completion test for measuring attitudes towards superiors and sub-ordinates which might help to predict the behaviour of an intermediate in the face of

conflicting demands from those who supervise him and those whom he supervises. They reported a correlation of .32 with a direct measure based on an information test. However, interpretation of these values was restricted owing to a correlation of $-.42$ with a direct scale of alienation.

Other investigators such as Forer(23), More(48), Spache(67) also report favourable results.

In India the Sentence Completion Test was very profitably used in the study of Group Tension—Murphy(51). The Indian Army also uses a combination of the Word Association & the Sentence Completion Test.

The usefulness of the Sentence Completion Test could be judged from Guildford's(25) Presidential remarks, before the Western Psychological Association. Presenting his careful studies in the Army Air Force, he pointed out that Sentence Completion Test discriminated very well between psychoneurotics and normals. It is interesting to note that Sentence Completion Test as reported by Levy(54) was regarded as a third most useful technique by 42 clinical psychologists.

The Thematic Apperception Test (TAT):

Discussion of previous research.

This test is too well-known to require any description of the test material or its usage. It is no longer a tool for use in the clinic for which it was originally devised. It has been extensively used in non-clinical situations. Though in some cases the use of the test has not been very encouraging as in the O. S. S. study(54) the V. A. Clinical Psychology Assessment Project(42) and other studies Cline(9), yet there have been other promising results which have favoured the continuance of the test in research projects in non-clinical settings inspite of previous low validities.

Thus in military leadership, Harris(28) Murray and Stein(53) Sohan Lall(66), report very favourably about the test. Similarly Dr. William E. Henry(32, 33, 34, 35) of the University of Chicago reports in a series of investigations the effectiveness of the test in assessing senior executives of a large corporation. The test has been found useful in evaluating college achievement, Morgan(49, 50), Brosin(5). Combs(10), valuable studies reported the use of the technique for analysis of motivations. This instrument has been also useful to evaluate group and cultural factors, Horwitz & Cartwright (36), Henry and Guetzkow(30). Dr. Erwin K. Taylor (70) is currently developing a scoring system for the TAT for industrial use. It is hoped that his study will bring about a refinement in evaluating normal people in everyday settings. Thus its usefulness in personnel selection and in predicting job functioning of candidates, prompted us to make a further try-out of the test in this study.

PRELIMINARY TRY-OUT OF THE TESTS

The projective tests mentioned as well as the other tests were initially administered to the following groups for the purpose of preliminary try-out of the forms.

1. Students admitted in July 1953.
2. Students admitted in July 1954.
3. Students admitted in July 1955.
4. S. E. O. T. C. Trainees Batch 1, 2 and 3.

The Sentence Completion Test :

Modifications.

In the beginning, Rohde's Form(56) was used. On analysis of responses some items were removed and others added to raise the total to 80 items. There was a difficulty in understanding the language of certain items, eg. 'I feel

awkward.... 'I feel *embarrassed* when.....' Hence such items had to be discarded. It was also found that quite a number of the items yielded stereotyped responses as well as ambiguous or non-scorable responses. Hence it was decided to make suitable modifications. It was found that structuring the items yielded responses that were more easily defineable. In unstructured stimulus sentence completion items, the subject has tremendous latitude and considerable freedom of projection. The interpretation of the implication does become a difficult task. However in highly structured items, the subject is literally forced to pin point his responses in those areas of intrapersonal and interpersonal aspects of behaviour in which the Selection Team is interested. Again the number of items that tap each of these areas could be limited to the extent of the weightage to be given to these areas as determined by the importance of the various variables.

Four other forms with relevant changes were tried out at various stages before a modified version was produced. The items were extracted from Rhode's(56), Sack's(63), Forrer's(23) and Stein's(61) forms. The number of items were raised to 100, to increase the reliability of the instrument. The 100 items of the test were divided into two parts to reduce fatigue. An attempt has been made to produce two forms that could be regarded as equivalent. Thus the items of each area were split up in both the forms taking into consideration the meaning of the item stem. The basis of this new form was to include sufficient items relating to (a) motivation, (b) ego-strengths as shown by capacity to withstand stress, (c) flexibility in mastery of emotional challenges and (d) responses which yielded a high index of individuality rather than a high index of stereotype.

Abbreviated Group TAT :

Modified versions of Henry (30) and Murray's (52) Cards were used. The choice of using Henry's Cards, (originally designed for the measurement of group dynamics factor), was made on the score that they would tap or elicit information mentioned in another paragraph.

Modification of Cards :

The characters of Henry's and Murray's Cards were depicted in Indian dress and, where necessary, in our cultural background, as in the farm scene. Thomson points out that important personality data can best be elicited when the subject can easily identify with the stimulus figure. "The identification is likely to be greatest when the pictorial material reflects the culture of the individual."

TAT Cards used.**Card—Conference Group :**

- (a) Feelings about interpersonal relations.
- (b) Feelings about group goals and productivity.

Card—Man in Doorway :

- (a) Feelings towards a lone individual and towards a single individual's relation to the world of forces around him.
- (b) The source of motivation.
- (c) Feelings towards inactivity.

Card—Two Men :

- (a) Feeling about relationships between two people.
- (b) Ascendant and submissive interrelationships.
- (c) Feelings toward authoritative pressure directed toward it and also its own use of authority.

Card—Woman & Man :

- (a) Feeling towards assertion and dependence.
- (b) Potential for breaking established frame work and relationships.

Card—Informal Group :

- (a) Emotional involvement in a group task.
- (b) Attitudes and feelings towards interpersonal relationship.

The below two Murray's Cards were selected to obtain the following information.

Card—Farm Scene :

- (a) Eliciting feelings towards interpersonal relationship.
- (b) Attitudes of personal mobility and ambition.
- (c) Attitudes towards tradition as positive or inhibiting.

Card—Operation Scene :

- (a) Reality orientation.
- (b) Ambition and future planning skills.

II. Outline for analyses of Test Responses :

To evaluate the factors or characteristics discussed earlier it was felt desirable to group the factors into the clusters so as to facilitate analyses. Adapting Henry's(31) conceptual framework for analysis, the following outline was worked out for our purpose.

A. Interpersonal and Group Co-hesiveness Cluster :

(a) Family dynamics and family emotional atmosphere. The dominant emotional atmosphere of the home and the interpersonal relations of family members.

(b) Approach to interpersonal relations. Emotional basis of ties to other people and the quality of these ties.

(c) Peer relationship: Emotional relationship to male and female peers and to groups. Nature of friendship and group patterns. Patterns of behaviour of co-operativeness vs isolation, resistances vs forced involvement and the nature of these to both work and social relations.

(d) Authority relationship: Acceptance or rejection of authority relationship, nature of emotional ties to autho-

rity figures and ways of dealing with authority relations. Attitudes towards subordinates, ability to take or give directions, acceptance of organizational demands and goals.

B. Motivational Cluster :

- (a) Nature of ambitions and aspirations.
- (b) Ability to apply sustained energy.

C. Emotional Resources and Stability Cluster :

- (a) Insight and evaluation of own abilities.
- (b) Stress-tolerance. Apprehensiveness of failure and reaction under pressure and stress. Nature of ego strengths, confidence and morale level. Outlook towards life.
- (c) Flexibility and adaptability to changes.

D. Intellectual Effectiveness Cluster :

- (a) Adequacy and efficiency of intellectual functioning.

III. Method of Interpretation :

Though the field work evaluation report did give the final grade rating at the end of the report, the descriptive part furnished complete observational notes of the student's behaviour and performance in the field and in supervisory session. This descriptive part adopted the method used in Case-Work and was more meaningful than the rating. It presented a more comprehensive pen picture of the individual personality.

Accordingly it was decided to write-up the psychological report in a clinical form. This assessment reported a dynamic analysis of the student in terms of the categories stated earlier. In interpreting both these two projective tests, we adopted a holistic or organismic type of analysis.

The interpretation was no doubt a *blind analyses* of the responses of the two tests. However two raters,

one a consultant thoroughly conversant with dynamic psychiatry and the other a projective analyst, read each protocol and made their own assessment of the subject. The assessments were then discussed at a joint clinical conference, inconsistencies were discussed and significant evidences were examined.

Validation & Results :

As the entire question of projective testing in prediction of professional training success is still largely in its infancy, a great deal of preliminary exploration with projective tools had to be carried out, so that the data could be comparable to the criteria used as basis for evaluating performance in field work. As Cronbach(14) rightly mentions....“until one has material worth validating research must hold a secondary place.” Hence a great deal of effort was expended in refining the tools so as to yield maximum information relating to the criterion. The data reported is for the group entering the Faculty in 1956 and passing out in 1958. The students are all post-graduate students.

RESULTS

A. The Selective Efficiency :

Employing the Jenkins (39) index of selective efficiency, the ability of test to accept and reject individuals rated successful and unsuccessful, was as follows :

TABLE I

Criterion	Test Predictions	
	Adequate	Inadequate
Successful	9	5
Unsuccessful	1	8

$$S = .478$$

B. Fisher's Exact Probability Test.*

Since N is small, the Fisher's test is also employed. The significance level selected is : $\alpha = .05$.

TABLE 2

Criterion	Test Predictions		
	Adequate	Inadequate	
Successful	9	5	14
Unsuccessful	1	8	9
	10	13	

With these marginal totals $A + B = 14$ and $C + D = 9$ and with $A = 9$, the observed $C = 1$ has a one-tailed probability of occurrence under null hypothesis (H_0) of $p \leq .025$. Since this P is smaller than our level of significance, $\alpha = .05$, our decision is to reject (H_0) in favour of the alternative hypothesis, that successful and unsuccessful students differ in their Sentence Completion and TAT responses.

DISCUSSION :

The purpose of the study was to explore qualities essential for Social Work Education and to evolve a battery of tests to eliminate individuals who would make a poor adjustment to the school programme and to select individuals who would make a successful adjustment. The test however as mentioned earlier are not intended to displace the present system, *viz.* the interview and the autobiography, but to supplement the data obtained from these two sources. The two projective tests reported here comprise only part of the battery of tests.

Though the study was initiated in 1954 a great deal of exploration with the tools had to be conducted. Hence

* Seigal Sidney(65)

validation data is obtained for only one group *viz.* the batch of students who entered in June 1956 and completed the course in April 1958. The number of students in this batch was only 23.

It might perhaps be mentioned here that it was hoped to utilize the Social Education Organiser Training Center (S. E. O. T. C.) trainees for the purpose of validating the tests for the project. However, the following difficulties arose. Hence no findings are worked out.

- A. The group was a mixed one as far as educational standards were concerned, ranging from those who had passed only the S. S. C. to the post graduate course. This would not make the groups comparable to the Faculty group.
- B. The trainees' standards of English on the whole was very poor, and as such their responses on the Sentence Completion test could not be properly evaluated.
- C. The criterion of the S. E. O. T. C. is still very fluid and has no grade system, nor is there any specific standards to determine passing or failure. All trainees who undergo the course are declared successful, except in unusual circumstances, such as severe or chronic illness.

The Sentence Completion and the TAT were employed in this project because of the ability of the tests to obtain a total picture of the individual, as well as the inability of candidates to present themselves in a favourable light by responding to items that were acceptable as in other tests.

The tests were administered in Faculty to a pre-selected group of students. They were given after the students had been screened by an interview and an autobiographical analysis.

The purpose of using the tests seems to have been accomplished, as is evidenced by the index of selective efficiency. This index has been reported to be roughly comparable to the validity coefficient. It indicates how well the test accepts successful individuals and rejects unsuccessful individuals. The index of Selective Efficiency with the group admitted in 1956 is .478.

Since the number of cases is small, $N=23$, the Fisher's Exact Probability Test was also employed. The observed data was found to be significant at the .05 level. It should therefore be concluded that Successful and Unsuccessful students do differ in their responses to the Sentence Completion and Thematic Apperception Tests.

As regards the failures in prediction of the five cases who did succeed, it was found that they were due to the tester's tendency to underrate these students because of severe pathological symptoms of severe anxiety, nervousness feelings of inadequacy. Of these students one received an A rating in Field Work, one received a B, and three received a C rating. Perhaps a greater attention to ego-strengths and to what Brower(6) 'calls coping mechanisms' might have helped us to evaluate how these students could function inspite of whatever might be wrong with them.

However in considering the failures in prediction one has also to take into account the criterion itself. Cronbach(14) remarks that "all validation is limited by weaknesses of the criterion." The staff has been working since the inception of the school towards evolving an adequate criteria. So far two systems have been evolved and discarded as inadequate; and a third attempt to further refine the criteria factors is in process.

CONCLUSION :

As mentioned earlier in the preface and introduction, we would like to emphasize the exploratory nature of the study. A great deal of further experimentation and investigation still remains to be carried out before conclusive evidence is obtained.

FURTHER RESEARCH

1. An Objective Scoring System :

(a) *Sentence Completion Test* : Rotter & Willerman(58) remark that global interpretations from Sentence Completion tests tend to be less reliable statistically than those based upon single item analyses. Excellent attempts have been made in recent times to devise objective scoring systems to enable application of statistical techniques to clinical data. Forer (23), Trites (72, 73), Kavruck (41). Hence an attempt has been made to work out an objective scoring sheets for the Sentence Completion Test which it is hoped to try out with the new entrants.

(b) *TAT* : Objective evaluation of TAT has similarly been worked out by Eron(21) Hartman(29), Eron, Callahan, Terry,(18) Eron & Auld,(19, 20) Garfield & Eron(24). A work sheet for the TAT has been devised for use with new entrants.

2. *Intra-individual Variability* : It is hoped to similarly investigate the intra-individual variability on the Sentence Completion Test.

3. *Apperceptive Norms* : It is also planned to carry out a normative study of the TAT on the lines suggested by Resenweig & Fleming (60) and Eron (21).

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