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**ROLE SET BASED ASSESSMENT CENTER
APPROACH TO PERSONNEL SELECTION**

By

T. Venkateswara Rao

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**Indian Institute of Management
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Name of the Author T. Venkateswara Rao

Under which area do you like to be classified? EDUCATIONAL SYSTEMS
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ABSTRACT (within 250 words)

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This paper presents a role set based assessment center approach to personnel selection. According to this approach an assessment center should be established in any organization interested in personnel selection and appraisal on a continuing basis. The assessment center should reflect either in its members or in its members' experience from the members of the role set of the faculty position for which a candidate is being assessed. Experience of using this method in a training organization in their selection of faculty is described. Several techniques used in the process along with involvement of members from the role sets of faculty in this organization are described. The costs involved while establishing this system are very marginal in view of the systematization that takes place in appraisal and the training value it has for members of the role set.
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Date 4/2/1975

Signature of the Author



T.V. RAO

Role Set Based
Assessment Centre Approach to Personnel
Selection

T. Venkateswara Rao

In this paper a multidimensional approach to the establishment of a personnel selection and appraisal system is presented with an example from an organization where it has been tried. The name of the organization is kept anonymous for reasons of confidentiality.

Today personnel selection and appraisal is being done in most of the organizations in our country using one or more of the following methods:

1. Ability tests where certain abilities believed to be critical in the performance of a job or role for which the candidate (applicant) is being considered. Often general mental ability tests are inevitably included inspite of the fact that studies have thrown enough doubts on the use of these tests in predicting effective performance of the job (Kent & Eisenberg, 1972; McClelland, 1973).

2. Aptitude tests where the capacity of the person to learn the role he is expected to perform as an incumbent are studied. Differential Aptitude Tests etc. are some of the standard tests that have been used. Some times special aptitude tests are constructed borrowing items from here and there. In fact, indiscriminate use of aptitude tests alone is likely to bring down the predictability of job success. For example Thorndike and Hagen (1959) obtained 12,000 correlations between aptitude test scores and various measures of later occupational success, on over 10,000 respondents and concluded that the number of significant correlations did not exceed what would be expected by chance. Holland and Richards (1965) and Elton and Shevel (1969) have shown that no consistent relationships exist between scholastic aptitude test scores of college students and their actual accomplishments in social leadership, arts, science, writing etc. McClelland (1973) cites several such examples indicating the limitations of aptitude tests.

3. Personality tests which are used rather rarely and whenever a psychologist is readily available for the organization as a consultant in such matters. Such tests have also not shown any consistent results.

4. Interviews which are organized generally in the final stages of selection after the top talent among the applicants is identified through tests, and a few have to be selected from them. It is generally at this stage the top management or administrators of the organization who have otherwise little time to spare come into the picture. This is so as they want personally to ensure that only good candidates are filtered in.

In any of these methods, the dimensions or qualities to be looked for in the applicant are assessed in one or more of the following ways:

a) Through a personnel department, one of the functions of which is to recruit people. The incharge members of the department may or may not be trained in recruitment procedures. Once in a while persons with behavioural science background are members of such departments. Apart from other things, they look for people in whom certain qualities are not present, presumably to avoid any future problems of indiscipline etc. The personnel departments generally find it difficult to conduct a thorough analysis of the job as the nature of the jobs is so much varied and the proportion of personnel in the personnel department to the total size is so low that it becomes humanly impossible to make a thorough job analysis of each and every job. Hence they base their recruitment strategy on what the supervisors/incharge departments where the posts are to be filled suggest and use hunches than any scientific analysis. In fact some organizations have standard forms on which a departmental head (who could either be a technician, administrator or a combination) has to supply information for the personnel department. The dimensions printed in such proforma impose certain constraints on the thinking of the section incharge. For example, whenever new posts are to be filled in the university departments, the head of the concerned department has to supply information to the registrar on a standard proforma. Such proforma contains columns like subject in which the post is required, educational qualifications and years of experience in research or teaching required. The head of the department has to specify the number of years of experience rather than the nature of experience. Such stress on certain details biases the specification of requirements unless those who specify make extra effort.

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b) Through a consulting organization which may help the personnel department, supplement to its efforts or take its place (if there is no personnel department or if the top management feels the need for it). In such occasions the consulting organization has to first comprehend the situation and correctly estimate 'what is it that the organization is looking for'. This requires a careful study of the system, its previous experiences and history, future projections etc. In cases where the consultants have previous association with the same organization, they are in a better position to advise. Otherwise, first they have to study the system and the costs for such a study make the assignment look more expensive for the organization. As organizations are always not willing to spend exorbitant amount of money on a few selection affairs, the consulting organization has to quote less costs and save embarrassment and fear of losing the client. In such cases the alternative left for the consulting organization is to save time in conducting a detailed study of the system and job requirements and try to use its previous experiences with similar recruitments. The danger of such approach is that the consulting organization is likely to apply some standard techniques that the consultants believe are applicable and as a result the selection gets diluted. However, neither the consulting organization nor the client organization may be aware of it, because, no one knows if the rejectees could have been worse than those selected.

c) A third approach, which is rather looked upon by the modern management as a traditional approach is not to use any other department or outside agency. This is based on the philosophy that management generally knows what they are looking for and therefore through interviews they can generally locate the best candidate. In this system a few internal experts related to the role for which recruitment is taking place along with a few external experts form an interview committee. Applications are invited and the committee meets only on the day of recruitment and selects together. Sometimes they use rating scales if some of the members of the committee are scientific minded. Otherwise, the selection is purely impression based. They generally end up selecting a tactful interview respondent than a tactful role-incumbent. There is also a danger of one or two members of the interview committee dominating the selection process and interviewers have tendencies to select members who are similar to them.

Organizations use one or the other of the above methods. Every method has its own advantages and limitations. While no single approach is better than the first which is in turn better than the last. Organizations have rarely tried out a combination of these approaches. Although a combination might look expensive, the experiences with assessment centres (Byham, 1972; Bray et al, 1972) show that they could be managed with limited budgets and once the system of recruitment is established it is highly efficient, inexpensive and can be made self-sustaining. Another advantage of following the assessment center approach is that what may start as an assessment center for new recruitments could also be developed into establishing a good performance appraisal system and forming a base for training and developmental activities.

In the assessment center approach the organization develops its own internal resources for the continuous assessment of its members and for the recruitment of new members. In the beginning help of an external agent or a testing consultant may be used, but once the system is established the external help may get minimized. One of the roles of an external agent in developing the assessment center is to develop internal resources so that the system established continues to function in the absence of the external agent. The external agent becomes a specialist after the system is established and is used by the organization only when its internal resources or the assessment center lacks certain skills required for assessment which the consultant only possesses. In some instances the organization may employ part time experts who participate in the activities of the center. Assessment center approach also brings together many techniques including situational exercises, interviews, business games, tests, discussion groups, and a variety of simulations in an effort to elicit patterns of behaviour previously identified as successful in a given management (or any other) position for which candidates are assessed (Byham, 1972). Such a multi-technique approach based on the concept of the assessment center system is described below with an example of experience from an organization. A new dimension added to the assessment center approach in this paper is to use 'role set' as a base for operationalising the center.

The Organization

The organization involved in the try out of this system is an educational organization imparting professional training. Figure 1

presents the organizational chart of this organisation. It has 'n' number of branches in different towns. The main branch is in a large city. Each branch has a training manager (TM) incharge of all the training activities. The training managers also is the overall incharge of all the activities of the branch. (Some of them in small branches were designated as assistant training managers). He is the chief executive of the programmes in the branch. He has a couple of administrative staff to assist him in his activities. He has honorary part time training staff collaborating with him, over whom he does not have any administrative control except the freedom to use or not to use their services. In fact such staff are full-time members of other organizations and come and teach in the branch whenever required. Such part time honorary staff vary from 20 to 30 in the different branches. The TM chalks out a time-table in consultation with these faculty. Curriculum is more or less fixed but faculty varies as some time TMs keep on trying new faculty members for each session. Each branch offers both part time and full time training programme. In full time programmes a large proportion of time is spent by students gaining field experience under the guidance of the TM.

There is a Chief Training Manager located in the main branch under whose guidance the rest of the training managers work. The Chief Training Manager (CTM) possesses certain additional technical skills which none of the training managers have to the same magnitude. While his level of knowledge is at least at the same level as the other TMs, he has additional technical knowledge. In order to impart this to the trainees he keeps on touring from branch to branch taking sessions. Besides, he manages the main office from where he also coordinates the activities of all the branches. He organizes monthly meetings sharing information about any innovation in the profession, discussing placement activities of the trainees, setting policies of trainee selection etc. For all purposes he takes care of the technical and academic administration. However, general administration is done by the Managing Director (MD) who is also a technical expert. However, MD operates only at policy level, determining budgets, obtaining sanctions for finances, publicizing the work of the branches etc. MD is also a part time honorary employee to look after the organization. He has a few more important tasks besides the management of this organization. The Board of Management is the board of trustees who have the overall controlling power. The final authority of sanctioning the budget etc. is with them. They have the power to expand or abolish the whole organization.

Entry Point

The organization started with the ^{main} branch a few years back with only one Training Manager. After successful training of a few batches of trainees the board of management decided to open new branches and the other branches came into existence gradually over years. After a few years of functioning the Board of Management wanted to review the impact of these branches in terms of the effectiveness of professional training imparted by them to the students. At this time the Board has requested a team of experts to study the impact of their organizations on trainees and to suggest areas of development for the Training Managers. As a part of this programme the team of experts have evolved scientifically oriented criteria to assess the professional effectiveness of the candidates trained at these branches. As a part of this study the role played by the training managers was studied through a role analysis technique. The author of this paper happened to study this aspect as a member of the team.

At a later stage the Board of Management decided to open some new branches and increase the number of training managers in the old branches. Added to this was the problem of turnover of some training managers. Thus there was a need to recruit new training managers for which purpose the assistance was sought.

Some of the Training Managers had to be upgraded as they spent quite some time as assistant training managers in some centres. The board also wanted to assess if their performance was upto-mark.

Procedures of Previous Selection

Previously the training managers were being selected by the Board of Management. In such selections although the CTM was a member he was not taking part actively for fear of authority. He had a feeling that he sits there for name sake and it is the show of the management and that his opinion has never ^{been} considered. He also felt that since the Board is quite at an occupational distance from TMs, they had rather limited understanding of the role of the TM, and their judgement was based on highly subjective criteria like whether the candidate knew what the board knows. Although such a process did get good TMs in the past due to certain skills of the Board members, such a possibility is not ensured always. In order to ensure the selection of proper TMs and in order to evaluate some of the existing assistant training managers, help of specialists was sought.

Strategy for a multi-dimensional approach based assessment center

During the preliminary discussions it was suggested to the MD that taking help of a testing specialist for each occasion would be too expensive for the organization and the organization should develop its own internal resources for future selection and assessment of TMs. It was suggested that if considerable time is spent in the beginning for establishing the recruitment and appraisal system based on the assessment center approach using a multidimensional framework, the outside expert may become redundant in course of time. When it was agreed upon to establish the system the process began.

Task Analysis

The first step in establishing the system is to make a task analysis of the job for which the recruitment had to take place. Such a task analysis had already been done as stated earlier in connection with a study. From the task analysis, the major abilities, knowledge, skills, attitudes and values required to perform the tasks were listed. For example, one such skills listed is a counselling skill as the TM was constantly required to guide the trainees and understand their feelings. High empathy was found to be a critical dimension for this skill on the part of these training managers. Similarly, an innovative and flexible attitude was found to be another characteristic. Such characteristics needed for an effective performance of the tasks as a training manager were listed. These characteristics have been grouped under the following categories after a thorough analysis and discussion with some of the existing TMs.

1. Knowledge of the Professional Inputs to be given in the courses

This included only the critical aspects a TM should know. The preparation of the trainees into the profession included providing them knowledge on several specialized aspects, and some general aspects of the profession. For specific knowledges to be provided to the participants the TMs were banking on the external (part-time) faculty. Such specific knowledge based inputs constituted about 50% of the training inputs. The Training Managers could acquire these knowledges in course of time by sitting through the class session of the external faculty. But without the general knowledge about the profession, the Training Managers would not be able to do anything in the programme and would also not be able to identify the specific knowledges and organize them. This required full knowledge of professional development.

2. Organizational Skills

While knowledge of the professional development and inputs needed for such a development are necessary for a TM they are not sufficient without an adequate organizational skill for the training programmes. Such an organizational skill included designing the programme, time table and curriculum, exploration of external resources, coordination of such resources, emergency behaviour (when external resources do not come upto expectations), providing linkages to various inputs, follow up, evaluation and integration. Ability to work under stress was found to be another important component. Such skills were found to go a long way in making the programmes successful.

3. Leadership Qualities

Besides teaching and organizing teaching for the trainees, the training managers also had to take care of the placement activities. There were two kinds of placement which he was expected to provide. One is the in-training placement (internship) for the trainees to gain work-experience in the areas of their specialization. The second was permanent placement service which he was expected to provide by assisting each candidate who completes training to locate a suitable opportunity where he can use the professional knowledges and skills he learnt in the training programme. Both these facilities to be provided by the TM required him to be constantly alert to the professional environment, take initiative, comprehend environmental resource opportunities, maintain relationships with external agents who may be potential contributors in this task and so on. In essence he required leadership qualities with some of the components listed above.

4. Personality Traits

Maintaining relationships within the office, with the trainees, with external faculty and student employers required certain other personality characteristics. For example a high self confidence, a belief that he can influence and change the environment (internal locus of control), a concern for others, and a concern for excellence etc. were found to characterize some of the successful TMs. Hence these personality characteristics were also included.

experiment with creative ideas, then he is likely to be more effective. If he is concerned all the time with having a telephone on his desk, having all facilities for movement etc. as essential conditions of work then he is likely to be more concerned about the absence of such conditions and will be less effective as TM. Hence this hygiene-motivation orientation as predicting adaptability to the organization was included as a dimension of assessment. These six categories formed six dimensions for selecting the TMs and also became the criteria of appraising the existing TMs for promotion.

Role set as a strategy of selection and appraisal system

In the traditional system of selection generally a few top people constitute interview committee and select the candidates. Most often the candidates may not be working at all with anyone of those present in the selection committee. Or sometimes those with whom the candidate would be working are represented in minority in the selection committees. Because of such minority representation it sometimes may be selecting candidates who may not have adequate skills of working with others not represented in the selection committee. Also, the candidate selected would meet the expectations of the selection committee and not of the persons with whom they have to work. A useful way of looking at the selection approach may be by using the concept of 'role set' from the role theory. The role set of an individual is constituted by all those people who have legitimate expectations from him and to whom he has obligations to perform certain functions. The role set for the TMs is given in figure. As may be seen from figure 2, the role set for a TM consists of other TMs with whom he has to work, trainees under training, administrative staff in the branch, honorary part-time faculty, branch alumni, the CTM, the MD, successful professional members who have established linkages with the branch and who keep on drawing from the

figure 2 about here

resources of the branch or contributing to the resources of the branch and the Board members.

5. Counselling Skills

Counselling skills is an integral part of the role of a training manager. He was expected to provide individual attention to the trainees. The trainees select a project related to their specialization and the projects they select by nature are generally quite different from each other. The TM was required to give guidance to each of the trainees for these projects. He was also required to follow up the trainees after they complete their training. Some of the trainees keep coming to him for advice as they come across problems during their organizational socialization. To tackle these problems an essential component of the TM's role was found to be the counselling skills. Such counselling skills included spontaneity in problem solving, helping nature in situations of crisis, diagnostic abilities of the clients' needs, a concern for the welfare of the client and a constructive approach to problem solving. In fact by nature of the profession the client had legitimate expectation that the TM would go with them to the field and help them solve problems. In other words, the TM was required to act as a consultant-cum-counsellor.

6. Adaptability to the organization

In an earlier paper on the use of non-cognitive instruments in personnel selection, the author had presented a point of view stating that one of the important aspects of selection that specialists overlook is to fit the person to the organization (Rao, 1974). So far the orientation had been to fit a person to the job, not bothering about the organizational culture. Through such selection, persons who have capabilities do get selected, but they would have problems if the culture of the organization does not fulfil some of his needs. It came out in the study that the different branches have varying working conditions. Some of the TMs have been doing very effective work although the work conditions in the branches were not so good. While they did express some concerns about the hygiene centred factors, their concerns were more of motivation related factors. Taking a clue from this it was felt if the candidate has more of hygiene centered expectations than motivation centered expectations, then he is less likely to be happy in the job. If he has more of the motivation centered concerns where he expects a challenging job, enjoys working with a variety of projects, feels a sense of achievement when some of the project he suggests to the trainee take shape and uses the opportunity he has to

By applying the analogy of role theory, every role in an organization will have a set of other connecting roles constituting its role set. By definition, the members of the role set will have certain expectations from the role-incumbent. Such expectations that are legitimate by virtue of the nature of the task position, tasks involved, norms and values of the organization etc. are critical and had to be fulfilled if the role-incumbent has to perform his role effectively. To meet the expectations he needs certain skills. While the members of the role set would be aware of the expectations they have from the role-incumbent (or focal role, here TM) they need not always be aware of the qualities, knowledge, skills, values etc. required on the part of the focal role to meet these expectations. However, experienced and insightful members of the role set may be able to identify such skills etc. required on the part of their focal role. Occupants of similar focal roles also are another potential source for identifying such qualities, skills, etc. required to meet the expectations of the role set and perform the role effectively. Besides, the members of the role set may not have ways of assessing such qualities, skills etc. in applicants.

Thus, in the role-set based framework of assessment center, the role of the assessment center specialist (testing specialist) is that of - (a) identifying the expectations of the role set and finding out consensual expectations of them through appropriate techniques; (b) identifying the qualities, skills, knowledge, values etc. required by the focal-role incumbent to be able to meet such consensual expectations; (c) devising techniques to measure these dimensions in the aspirants for the focal roles; (d) training members of the role set wherever needed to assess the potential candidates; and (e) though that developing internal resources by educating all members of the assessment center.

Using the members of the role set in assessing candidates has several advantages if they are inadequately trained by the expert before involvement. They would be more objective, feel more involved and may even clarify some misconception in the process. It has a self-educative value.

In this selection process weightages also need to be given to the different categories of people in the role set of the incumbent. This is so because meeting the expectations of different members of the role

set may have different weightages on role effectiveness. There should be representation from each of the role set categories. In cases where it is not advisable to use role-set members of certain categories indirect approaches may be used. Some such instances are described later in this paper.

This strategy was adopted for the establishment of the recruitment system in this organization. The number of persons included from each category of role set and the rationale for including them in the selection system is described below:

1. M.D.: The Managing Director had been the initiator of the whole programme. He possessed certain technical skills which are relevant for the TMs. On the top of it, from his experience of working with several TMs in different branches he also has an advantage of having assessed at a psychological level some of the qualities required for successful TMs. He had opportunity to assess the TMs in relation to his organizational skills, leadership qualities, personality traits and adaptability to the organization. Of these he has less information on the adaptability as his interactions are limited in this sphere. He had been weighting the TMs on how they organized the programmes and how they develop the branches once they were given a branch. Therefore, this advantage which the MD had was used for (a) identifying the qualities on these dimensions for an effective TM; and (b) for assessing these qualities once the instruments for such assessment has been developed by the testing specialist.

2. Chief Training Manager: The chief training manager had also similar advantages as the MD and in addition he had knowledge of the professional knowledge the TMs possess and the importance of such professional knowledge. He also had a few indicators of the counselling skills of the training managers. Because of these inputs he possessed, he formed another potential person to be a member of the selection and appraisal. He was also used for assessing the leadership qualities and counselling skills of the applicants.

3. Other TMs: Other TMs who have been recruited have gained enough experience of the qualities required to be a good TM. From their experience they now know the problems they have to face, the kind of activities they have to perform and the skills that are required to do effective job of training manager. From the positions they are occupying and from the experiences they had, they are in a better position

to look for the qualities required for this role. Therefore their involvement was also sought and a few of the experienced training managers also formed a part of the selection system. However, they had to be briefed in detail before they assessed the candidates. They participated in the assessment of leadership qualities, counsellor skills and other personality characteristics like initiative etc.

4. Alumni: The students who have passed through the courses offered by the branches and who have established themselves in the profession were thought of as another potential source. As alumni, from time to time they keep on drawing on the resources of the TMs and have certain expectations from the TMs. As students they have gained impressions about what a training manager is and how he should be from the trainees' point of view. Therefore, such alumni formed another potential contribution to the assessment system. They were used in the assessment of problem-solving abilities, and counsellor skills as these are the two areas where they have relationships with TMs.

5. Honorary part time faculty: Although honorary part time faculty have expectations from the training manager their expectations are not critical to a great extent. What is more important is how the training manager would manage cooperation from the part-time faculty. Certain qualities required for this role have been tested in an indirect way by inbasket simulation exercises involving role relationships with part-time faculty. No real part-time faculty was involved because they would look from their angle and not from the angle of what is required for a TM to be effective in the branch in his relations with the part-time faculty. The in-basket game also tested organizational skills of the TMs in relation to curriculum, external faculty, intership programmes etc.

6. Administrative staff of the branch: They formed a critical part in terms of how well the training manager will be able to make use of the services of these staff. This is again an organizational skill and including the administrative staff directly in the selection system was thought to bias the system. This was indirectly measured through inbasket technique testing organizational skills of the candidates centering round the use and management of the administrative staff.

7. Trainees under training and successful professional members: They have also been used in the selection system. A survey was conducted requiring the trainees to list down their expectations from a TM and

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the qualities they thought would be necessary for/effective TM. This was done in a few branches when the trainees were under training. Their replies were grouped into a few categories and these traits were included in one or the other of the categories described earlier. Interviews with successful professional members were also used in the same way. However, at one time it was decided to use the successful professional members directly in assessing the professional knowledge etc. of the candidate. But for reasons beyond control they could not be used. Ideally this would have been better. The main danger in using successful professional members seem to be again that they may look for characteristics on which they have cashed for their professional growth and these may have biased opinions. Thus, a survey of such characteristics from interviews with a few professional members was thought to be more appropriate as only common characteristics could be taken up.

8. Board of Management: While all the above categories of people formed a potential way of finding out what a training manager requires and how he is evaluated by different categories of role set, one important aspect which has not been taken into consideration is how well he will fit into the philosophy of the whole system. When the training system was established originally, it is the board which had a comprehensive view and had future plans of development for the organization. The qualities that are judged from the use of the above categories do not include how well the candidate fit into this philosophy and futuristic model for which only the board had knowledge. On the top of this, with the experience from running their systems the board certainly had better use of the general environmental knowledge required for a training manager to move with times. While assessing the candidates on the six dimensions described earlier using the members of the role set took care of how well the candidate would fit into the existing system, it did not take into consideration another dimension of the overall professional environment in the country or state; the challenges the system has to face with changing environment etc. The board of management was suggested to take a leading part in this and identify a few more experts if necessary to assess the candidates on this dimension. Hence the board became a potential sector in the selection.

Process

Thus, in terms of the process the selection system developed consisted of two stages; Stage 1 involving the minimum role set of the TM and the characteristics he should have in order to perform his role

effectively; and Stage 2 assessing his ability to cope up with changes in the organization and awareness of the general environment related to the profession for which he is being considered.

While establishing the system the following procedures were followed:

1. Delineating the characteristics required for a successful TM. This was done through (a) interviews with the different categories of people in a TMs role set including the board and listing down their perceptions of the requirements; (b) field observations of some of the TMs when they are actually in operation; (c) scientific study through certain non-cognitive instruments; and (d) survey of the characteristics required for a TM from some of the literature available on similar roles.
2. Categorization of these characteristics thus identified under each one or the other of the six categories described earlier. The descriptions given earlier are in fact based on such a posteriori categorization.
3. Determination of weightages for each of these categories. These involved determining the extent of emphasis to be placed on each of the six categories of qualities. Such weightages would have been determined in an ideal case through a scientific study of successful and unsuccessful training managers and finding out through a multiple discriminant function analysis or some such statistical analysis the relative weightages required to predict effective performance. However, since the number of TMs existing was very low such an exercise was meaningless. In view of this the consultant had to do an exercise of assessing the relative weightages through discussions with members of the role set and through discussions with other experts. Partly insights gained from the field observations were useful.
4. Identification, construction, and standardization of tests, exercises, etc. to measure the different characteristics falling under the above categories. Since the selection system was in the formulation stage, standard-

ising each and every test that has been developed was not feasible. In fact standardizing tests developed is built into the system whenever an assessment center based selection system is established. For example Bray et al (1972) report that assessment center was used as an aid to research in American Telephones and Telegraphs Company. As the system progresses and data increases in it different attributes can be evaluated and tests standardised. At this stage some tests developed had to be based on hunches rather than any scientific validation. However, for certain traits some standard psychological tests were used as they were readily available and found to be appropriate. For example, empathy was tested through a standardized test of non-verbal sensitivity.* Some counselling skills were tested on the other hand, through an analysis of the interaction between the applicant and alumni in a simulated role play. The interaction was taped and analysed by the different members of the role set used in the exercise. The specialist identified the critical attributes and designed a scoring system for judging the counselling skills. The scoring system was explained to the MD, CIM, TMs and the alumni who read the taped interactions of the TM with the alumni.

The characteristics: The characteristics measured are not described here in detail for reasons of confidentiality. However, an idea of these may be formed from the description given under various categories earlier.

Technique used: Once the characteristics have been identified different techniques have been used in the selection system. The following are some of these.

1. Standardized psychological tests-to measure certain personality qualities. This included some paper-pencil tests measuring some personality dimensions.

* Prof. Udai Pareek helped me in identifying these tests and designing some others.

2. Role play - where situations demanding problem-solving abilities and counsellor skills were measured through applicant transactions with alumni coming to him with problems. Only the applicant played the role of a TM and the other roles were real roles. Branch alumni facing real problems have approached and presented their problem to each of the TM (applicant) individually. Each transaction was to be completed in a stipulated period of time and they were taped. The alumni gave an absolute and a comparative evaluation of the different training managers he met on a uniform proforma. The taped transactions were coded afterwards on the different dimensions suggested by the specialist. The other members of TMs role set participated in the coding.
3. In-basket - to measure the organisational skills of the candidate. The in-basket exercise had some typical organizational issues the TMs generally face. They were asked to play the role of TM and deal with the in-tray issues.
4. Group Discussions - to measure the leadership ability in dealing with different issues and roles. Initiative, maintenance role orientation etc. were tested.
5. Projective tests - to measure some other personality orientations and motivational patterns found to be critical for the role. These were also used to measure the adaptability to the organization.
6. Knowledge tests - (paper-pencil) to assess the professional knowledge (general) needed by the position.
7. Interaction Analysis Technique - to study the interactions emerging out in the role play as well as in group discussions to study the interpersonal interaction orientation and counselling skills.
8. Interviews - to assess the understanding of the environmental context of the profession where he is expected to be in.

It may be pointed out here that Bray et al (1972) from their studies and experience at an assessment centre of American Telephones and Telegraphs Company point out that: inbasket for administrative skills, group and leaderless games for interpersonal skills; paper-pencil tests for abilities; ingroup and in-basket techniques for emotional stability; projective tests and interviews for motivation; projective tests for career orientations and dependency are the most useful techniques. The experiences in the present system are also very similar to their findings.

The testing techniques outlined here also meet to some extent the guidelines provided by McClelland (1973) in the following way:

1. The best testing is criterion sampling: This was done in this through the study of the roles and tasks by the expert team.
2. Tests should be designed to reflect changes in what the individual has learned: The roleset based approach presented here is based on the assumptions that roles can be learned given some minimal qualities required to learn these roles.
3. Tests should assess competencies involved in clusters of life outcomes: The multidimensional approach projecting into future here meets this requirement. Communication skills, leadership, ego development etc. are all integral parts of the system.
4. Tests should involve operant as well as respondent behaviour. Actual situations and simulated games, role plays etc. used here are based on operant behaviour and leave scope for the testee to choose any behaviour pattern he likes.
5. Tests should sample operant thought patterns to get maximum generalizability to various action outcomes: Motivational tests and projective tests used here measuring operant thought procedures meet this criteria.

Conclusion

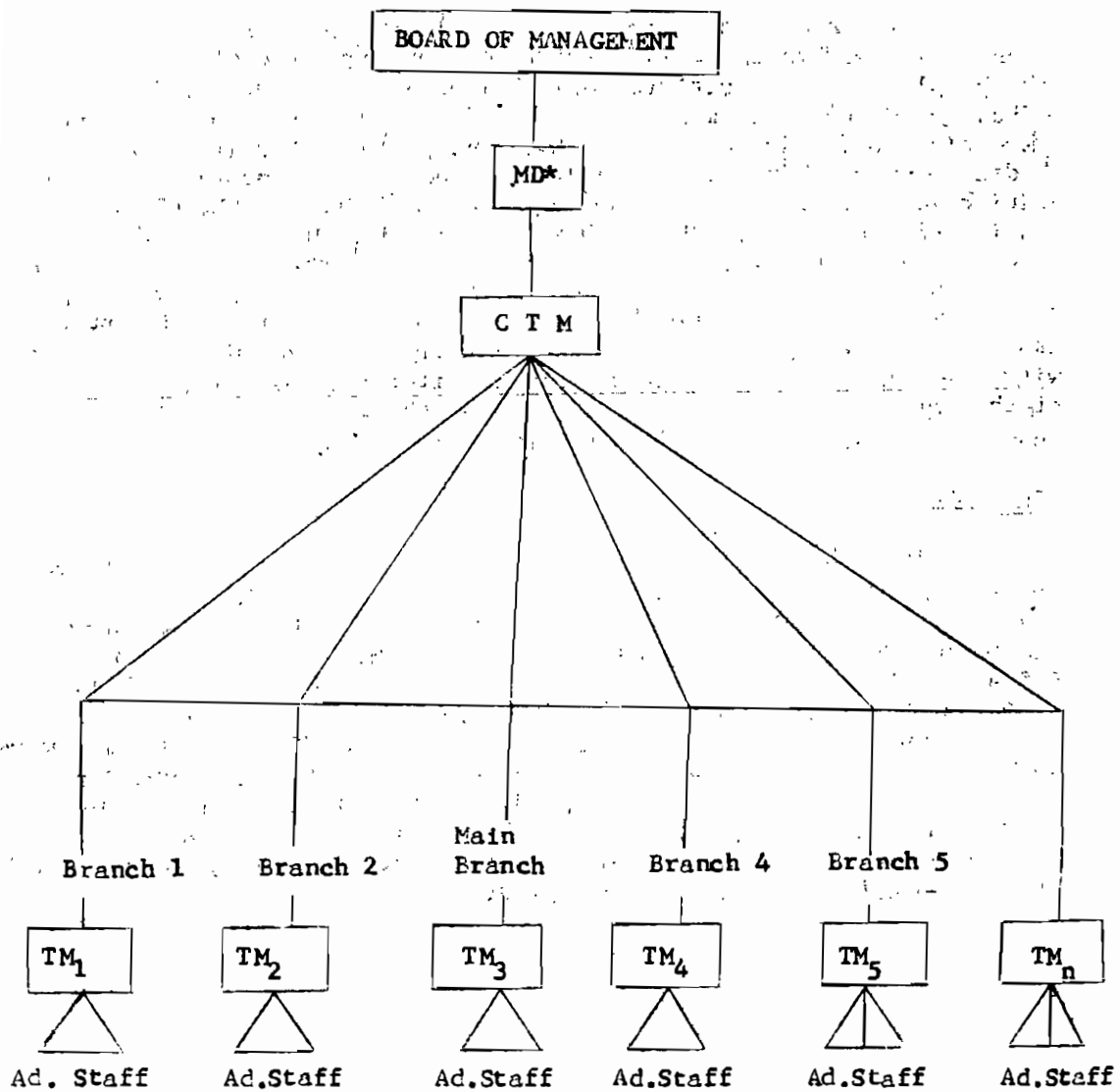
This experience brings out clearly that within the constraints we have in our system it is possible to establish new systems of assessing people by using multidimensional approach based on a role set framework. After the system was established, the CTM and other TMs developed expertise on the use of the system. Except for a couple of psychological tests on which much better training was needed, the scoring procedures, rationale etc. of all the techniques was explained to the CTM who becomes an internal resource. The limitations and flexibility of the system was also explained to him. The specialist worked with CTM in delineating the scope for changing system with rapid experience. The system is now in operation and hopefully the organization has skills sufficient to assess on their own with minimum involvement from an outside agent and with more accuracy and practicability. After the first experience many of the TMs reported that they learnt many things of which they were not aware earlier. Thus it had a training value too!

The costs

Although the initial costs of such a system as this would be high, once the role sets are studied and characteristics are identified and tests are developed the costs involved in seeking the assistance of an external specialist are minimised. The organization develops its own resources and will continue to work with these resources. Such an approach is suggested to organizations interested in the betterment of their selection procedures. This system is specially easy in organizations sold on MBO approach. This system is also useful particularly when (a) the past job of the assessee does not provide enough clues to their future work success; (b) when the candidates vary greatly; (c) when there are some common standards of acceptable performance; and (d) when job-requirements can be specified.

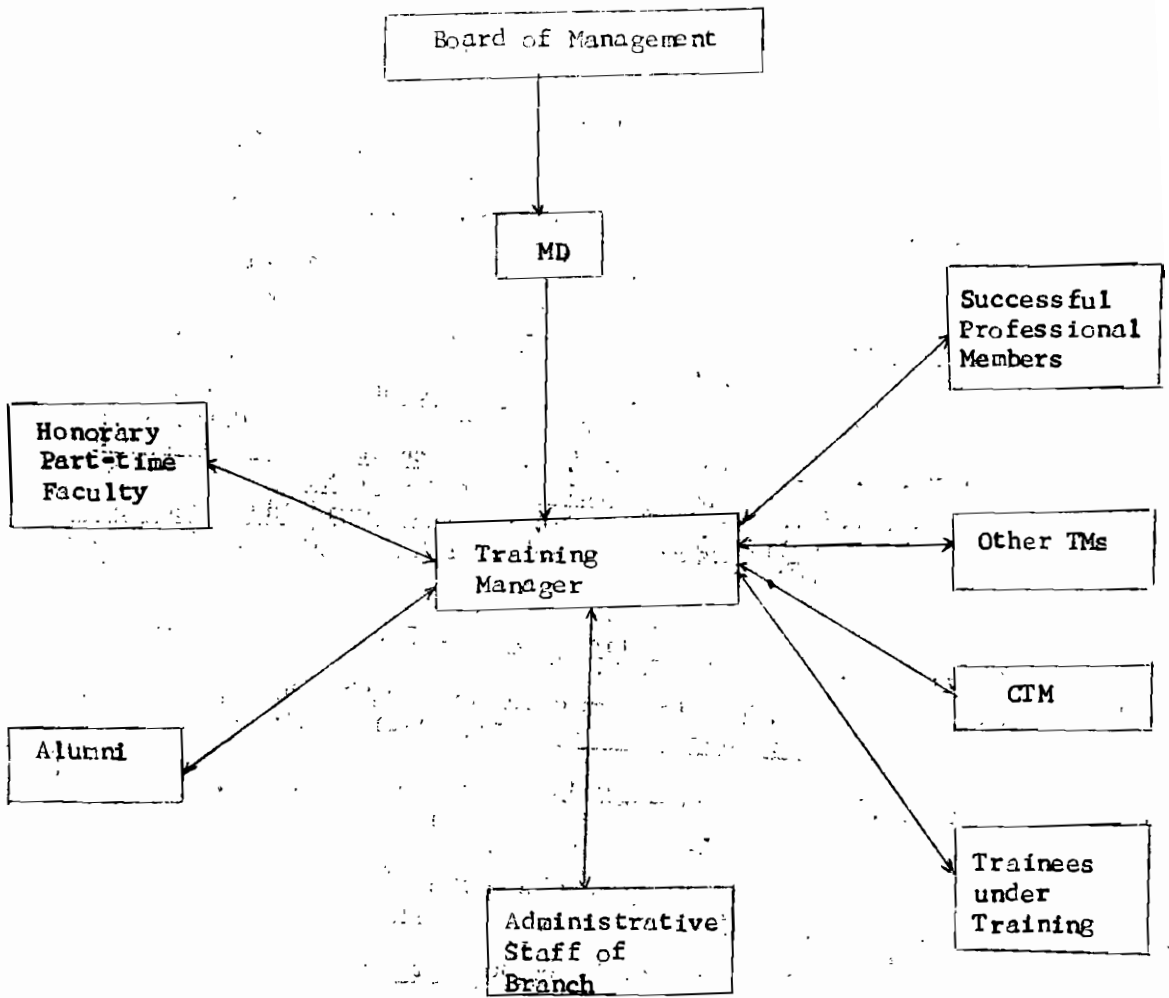
Figure 1

Organizational Chart of the Training Organization



TM = Training Manager (Chief executive of a branch)
CTM = Chief Training Manager
MD = Managing Director
* = MD is also a member of the board of management

Figure 2
Role set for the Training Manager



References

- Byham, W. C. "How a scientific assessment center works". in Alfred J. Marrow. The Failure of Success, AMACOM, American Management Association, New York, 1972, pp.136-153.
- Bray, D. W., Grant, D. L., & Campbell, R. J. "Studying careers and assessing ability". in Alfred J. Marrow. The Failure of Success, AMACOM, New York, 1972, pp.154-169.
- Elton, C. F. & Shevel, L. R. Who is Talented? An analysis of Achievement. (Research Report No.31) Iowa City, Ia.: American College Testing Program, 1969.
- Holland, J. L., & Richards, J. M. Jr. Academic and Nonacademic Accomplishment: Correlated or Uncorrelated. (Research Report No.2). Iowa City, Ia.: American College Testing Program, 1965.
- Kent, D. A. & Eisenberg, T. The selection and promotion of police officers. The Police Chief, 1972, February, pp.20-29.
- McClelland, D.C. Testing for competence rather than for intelligence. American Psychologist, 1973, 28 (1), pp.1-14.
- Rao, T.V. Use of non-cognitive instruments in personnel selection and appraisal. Indian Journal of Industrial Relations, 1975 (in press).
- Thorndike, R. L. & Hagen, E. 10,000 Careers. New York: Wiley, 1959.