Chapter 1
Introduction

1.1 Prologue

Introduction of objective type tests as a selection tool by the National Institute of Bank Management in 1972, brought in a revolutionary change in the banking industry. Bank jobs were becoming more and more popular due to the attractive salary and stability as main factors. A large number of applicants were interested in seeking bank jobs. Selection of right-persons objectively became the need of the time which could be achieved only through the objective type tests which assessed the different aptitudes and abilities in the person. The candidates selected through this process were found to be better than those selected through traditional descriptive type tests, and this gave a lot of satisfaction to the employer as well as to the employee. The present study is an effort to establish the relationship between objective type tests, the job-performance and the job-satisfaction of the banking personnel and to establish the effectiveness of objective tests in the selection process as one of the selection tools. The relationship of objective tests with the job-performance and the job-satisfaction of the employees recruited through these tests will strengthen the place of objective tests in the selection process. At the same time the study will also throw light on the scope for improvement in the tests.

The banking industry has acquired an important place in past two/three decades as they assume a crucial role in the country's economic development. The wage structure and the increasing opportunities in the career combined with job security has always been attracting talented youth from all over the country. The rapid expansion of banking industry which is a result of overall development of the country has opened doors making job-opportunities available for larger number of job-seekers.
In view of the large number of applicants for the bank-jobs, selecting the right persons became a challenging task. Thus it became necessary to use some scientific and objective method for selecting the right persons.

1.2 Development of the Selection Strategy:

Prior to nationalisation of banks in 1969, there was no uniformity in selection procedures followed by different banks for recruitment of clerks and officers. Some banks followed a selection process comprising only personal interview, while some bigger banks followed a procedure comprising written examination and interview.

With nationalisation of some banks in 1969, and consideration of public accountability in the matter of recruitment as a guiding principle, the banks had to adopt a selection system which was not only open for all eligible and equally qualified applicants to compete, but which also would be fair, impartial and effective in terms of selecting the most suitable candidates.

1.2.1 Evolving Objective Test Battery:

The National Institute of Bank Management (NIBM) itself as an apex level institute for research and training of the banking industry, decided to evolve a system of selection which will select the right candidates for the banks with total fairness and impartiality. For this purpose it constituted a Task Force comprising bankers, professors from Universities and Management Institutes and some of its faculty. This Task Force evolved a system, which will measure various characteristics required of a person joining the banks in clerical or officer’s levels.

In 1971, this task force approached the problem of scientific selection strategy for clerical recruitment. They first described the clerical job in terms of
various essential tasks, defining characteristics relevant to them and recommending a suitable tool/technique to measure these characteristics. Characteristics to be measured and the corresponding tool/technique were identified by Deshpande & Gadre, 1974, pp.267-268 as explained in Table 1.1.

### Table 1.1

<table>
<thead>
<tr>
<th>Characteristics to be measured</th>
<th>Tool/Technique for measurement</th>
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<tbody>
<tr>
<td>A Speed and accuracy in perception i.e. comparing names and numbers with speed and accuracy, concentration in monotonous work (required of most clerical counter and book-keeping jobs)</td>
<td>Clerical Aptitude Test (Matching names and numbers with speed and accuracy)</td>
</tr>
<tr>
<td>B Performing arithmetical computations (Not complex problems on time, work and speed or on compound interest, but quickness in fundamental arithmetical computations and ability to see number relationships required in various activities at clerical and officer's levels).</td>
<td>Numerical Aptitude Test (Addition, subtraction, multiplication, division with whole numbers, decimals and fractions, percentages, ratios, etc.)</td>
</tr>
<tr>
<td>C Comprehension of simple written English. (Only comprehension / understanding of written English and basic English grammar is expected. Expression in written / oral English in the form of essay / precis is not expected).</td>
<td>Test of English Language (Lower level; comprehension of written English passages and basic English grammar).</td>
</tr>
<tr>
<td>D Ability to learn on one's own / intellectual potential or general intelligence. (Required for learning the present clerical jobs, changes therein and potentiality for an officer's job).</td>
<td>Test of Reasoning (Ability to see relationships among a set of figures i.e. to deduce a principle and apply or extrapolate the principle. In view of the multiplicity of languages in India and difficulties for candidates in many regions to understand questions in English, a non-verbal test in the form of figures was recommended).</td>
</tr>
<tr>
<td>E Personality characteristics (such as motivation and task involvement, mental alertness, emotional stability, clarity of thought, social awareness, etc.)</td>
<td>Biodata and individual interview. (The interview should be structured to probe into these characteristics, rather than to measure knowledge of particular subjects and general demeanour).</td>
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</table>
F | Characteristics such as honesty and integrity. | Not really stable (across time) and not measurable by any test/tool. However, references from respectable persons may be called for, to check against questionable character.

G | Handwriting (only legibility is to be seen, no weightage or marks to be given) | The handwriting in the biodata form or a small write up at the time of interview may be seen for legibility. Candidates with very illegible handwriting may be rejected, otherwise no weightage be given.

The characteristics listed above are relevant to both the jobs - clerical and officers. However, characteristics listed under A, B, C, F and G were considered to be predictive of candidate's proficiency as a clerk, while those under D and E were predicting his potentiality as an officer. These were also in keeping with the broad national policy, organizational needs, and the potential applicant population. Further in order to make the whole testing speedy, objective and reliable, the Task Force recommended that, the tests measuring characteristics listed at A to D should be standardized objective tests. The personality characteristics were to be measured through a structured interview.

The clerical selection test battery recommended by the task force was named 'TFCS' (Test for Clerical Selection): It comprised of the four tests as per the details given below in Table 1.2.

**Table 1.2**

<table>
<thead>
<tr>
<th><strong>Name of the Test</strong></th>
<th><strong>Short name of The Test</strong></th>
<th><strong>Time Allotted</strong></th>
<th><strong>Total No. Of Questions</strong></th>
<th><strong>Max. Marks</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Of Reasoning Ability</td>
<td>TORA</td>
<td>30 Minutes</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Test Of Numerical Ability</td>
<td>TONA</td>
<td>20 Minutes</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Test Of English Language</td>
<td>TOEL</td>
<td>15 Minutes</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Test Of Clerical Aptitude</td>
<td>TOCA</td>
<td>8 Minutes</td>
<td>160*</td>
<td>160*</td>
</tr>
</tbody>
</table>

*This test was soon revised to a test of 60 questions with 60 marks.
The questions in TORA were in the form figures or drawings and was called a non-verbal test as it did not require the use of any language, hence free from language bias. It involved deduction of a principle from a given set of figures very closely related to the intelligence level of a candidate. Thus the TORA assessed general intelligence of candidate. TONA had questions on arithmetical computations only and did not have any problem described in any language. TOEL had questions on simple comprehension and basic grammar. TOCA had questions which involved matching of names and numbers and finding out whether similar or dissimilar. This test was meant for measuring the speed and accuracy in the perception of a candidate.

These tests were subsequently validated and standardized on a national sample from different parts of the country. Banking Service Recruitment Board (BSRB) was a body formed by Ministry of Finance, Government of India, to take care of the recruitment of personnel at clerical and officer’s levels in Public Sector Banks. For each State, a separate board was formed and it was taking care of the recruitment of personnel in all public sector banks for the State. Banking Service Recruitment Board-Mumbai, was taking care of recruitment in public sector banks in Maharashtra and Goa State. It may be mentioned here that recently, in the year 2001, the Government of India has taken a decision to abolish the BSRBs and accordingly it was implemented by abolishing the BSRBs in the year 2001. On abolishment of BSRBs, the banks are authorised to take care of their own recruitment. Each bank is formulating its own recruitment policy as they are given the autonomy in this regard. However, as the banks are governed by certain rules and regulations of the Government of India and since the need for objective selection process has been established and realised by all, the selection process being followed by the banks comprises objective type tests, descriptive test and interview. On introduction of BSRBs in the year 1978-79 the test structure was changed. Following was the test structure at the closure of BSRBs.
Table 1.3
Structure of the Battery of Tests

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Test</th>
<th>No. of Questions</th>
<th>Max. Marks</th>
<th>Weighted Scores</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reasoning Ability</td>
<td>50</td>
<td>50</td>
<td>80</td>
<td>Composite Time of 95 minutes</td>
</tr>
<tr>
<td>2</td>
<td>English Language</td>
<td>50</td>
<td>50</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Numerical Ability</td>
<td>50</td>
<td>50</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Clerical Aptitude</td>
<td>50</td>
<td>50</td>
<td>40</td>
<td>45 minutes</td>
</tr>
<tr>
<td>5</td>
<td>Descriptive Paper</td>
<td>3 out of 4</td>
<td>60</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

The test of Clerical Aptitude had 60 questions till 1984. The weighted score was 40 i.e. same as at present. The weighted scores for different tests were decided considering its importance. The Test of English Language was not given any weightage in order to ensure that the selection does not unduly favour the candidates studied through English Medium or having urban background. Considering subjectivity of the Descriptive Paper, candidates performance on this paper was not reckoned for merit ranking. Till 1984 the tests were separately timed and the total time allotted was 90 minutes. In 1985, the number of questions in Clerical Aptitude was reduced to 50 from 60, but each of these questions required more time as compared to the questions in earlier test of 60 questions. Hence, the total testing time was increased to 95 minutes from 90 minutes. In 1985, the BSRBs switched over to a system of composite time for all the four tests together, due to administrative difficulty.

In the clerical cadre examinations upto March 1995, the Test of Reasoning Ability, Numerical Ability and Clerical Aptitude had no verbal component. In view of improving the tests and bringing in variety of test-items it was decided to include few questions of verbal type in these three tests. Initially 15 verbal questions out of total 50 questions were included in the test of Reasoning Ability.
and Clerical Aptitude. Subsequently the number of verbal questions in the Test of Reasoning Ability was increased to 25 each. The test of Numerical Ability had 25 verbal questions out of total 50 questions.

Recently in the year 2001, IBPS carried out a ’Job Analysis’ of clerical and officer level in banks (unpublished report, Dolke). It was an exploratory study which aimed at collecting data so as to enable preparation of job-specification for the jobs performed at clerical and officer levels in banks. It was observed that both the incumbents and their reporting authorities feel that information input which covers cognitive skills and abilities are the most important factors required for carrying out clerical job successfully and effectively.

1.2.2 Cut-off Points:

On introduction of objective test battery as a selection tool, the Cut-off points or minimum marks for passing on each test were fixed up in such a way that the passing candidate should be above the lower 40% candidates (i.e. among the top 60% candidates in merit order) in the national sample. This test performance was examined in terms of adequacy for job-performance and was found to be acceptable for each test. For actual testing parallel forms were being developed. Subsequently, the national norms (cut-offs) were revised on the basis of 1980, 1981 examinations. Following various changes in the structure of objective tests over a period of time, the need for revision of strategy for deciding Cut-offs was felt. Cut-off scores are used in a variety of settings to help managers and administrators make personnel decisions regarding selection, training and promotions. Sometimes cut-off scores are set on the basis of a clearly defined rationale and sometimes they are set arbitrarily. One of the norm-referenced methods of setting cut-off score following "method of predictive yield" is solely based on the applicants test scores e.g. at mean, 1/4 standard deviation below mean etc. The advantages of this method are simplicity and minimisation
of subjectivity in judgement. In the selection examinations in the banking industry the above method of deciding cut-off point was accepted (Unpublished Report, Konar, 2000). In 1986, it was decided that the Cut-off for each test will be decided on the basis of mean and standard error of measurement, which is usually one-fourth of standard deviation. Thus for each examination fresh Cut-off marks for each test were calculated by formula Mean - 1/4 SD for general category candidate and Mean - 3/4 SD for reserved category candidates giving relaxation of 1/2 SD.

1.2.3 Use of parallel forms:

The number of candidates appearing for the clerical recruitment examinations was increasing phenomenally, year by year. The BSRBs were required to conduct the examinations in two or even four sessions. The possibility of a candidate who appeared in the morning session leaking out the questions to a friend who is appearing in the afternoon session was considered quite high. Therefore, a decision to prepare different but parallel sets of question papers for each session was taken. In-spite of the paper setter taking utmost care to make the tests parallel, and having comparable difficulty level, in reality it may not always come out to be true. Since the candidates appearing in two sessions were to be selected for a common pool of vacancy it was necessary to prepare a common merit list of the candidates appearing in two sessions and taking different test batteries. Therefore, it was considered necessary to check the equivalence of tests used in different sessions and it was found necessary to make the marks equivalent by way of 'equating'. This can be achieved by standardizing the marks obtained by candidates on different forms by equating the means and SDs of the marks obtained by the candidates.
1.2.4 Penalty for guessing:

There was no system of giving penalty for wrong answers. However, till 1988, the information hand-out being sent to the candidates, with call-letters giving information about the examination remained silent about this. In 1989 with a view to have transparency, it was decided to mention about 'no penalty for wrong answers' in the information hand-out. This resulted into heavy guessing or even marking same answer for too many questions and getting the credit by chance. To overcome this problem it was decided to introduce penalty for wrong answers for examinations held after September 1993. As each question has five alternatives of which one is correct and four are wrong, thus probability of marking any one of the four wrong alternatives is 1/4 or 0.25. Therefore, 0.25 mark was deducted for each wrong answer (Cronbach 1984, p.61). Information to this effect is given to the candidates through advertisement, information booklet and also the test-booklet (question-paper).

1.2.5 Eligibility Criteria:

Prior to introduction of BSRBs upto 1978-79 each bank had its own eligibility criteria on qualification. NIBM had recommended SSC with first class as the minimum educational qualification; which was adopted by only a few banks, while most of the banks prescribed second class graduate as eligibility criteria.

On the introduction of BSRB scheme in 1978-79 as per guidelines from the Banking Division, Ministry of Finance, Government of India, some modifications were made as detailed in Deshpande (1988, p.7). The eligibility as regards educational qualification for clerical cadre was revised as under -
"First Class in SSC (X Std), or Second Class in HSC (XII Std) or graduation in any class."

Appropriate relaxation was provided for SC/ST candidates and for posts requiring special skill like stenography. In 1987, first class and second class were replaced by 60% and 50% respectively. All the applicants were allowed to compete in the written examination.

It was observed that the performance of non-graduate candidates on the job-related selection tests was similar to that of the graduate candidates as per Deshpande (1988, p.35). Thus, jobwise, non-graduate had same potential as those with higher educational qualification. Competence of non-graduate candidates could be due to following factors:

1. Delinking university degrees from jobs provides an opportunity for those who prefer to enter the world of work to continue higher education.

2. Economic condition forcing them to opt for job rather than for higher-education.

The eligibility criteria on age for clerical cadre was fixed up at not below 18 years and not above 26 years of age as on 1st January of the year, if advertisement was released between 1st January and 30th June of the year and 1st July of the year if the advertisement was released between 1st July and 31st December of the year.
1.2.6. Setting up IBPS:

The work of developing the new selection system was entrusted to NIBM. The NIBM in co-operation with certain banks, experimented the new selection system in 1970-71 in various parts of the country. The new system got spontaneous response from the banking industry. To handle these activities related to selection of personnel in banking industry, NIBM set-up a special unit and named it "Personnel Selection Services" (PSS) unit of NIBM. The PSS unit demonstrated the effective way of handling various operations involved in recruitment, viz. designing advertisement, screening and processing of applications, speedy manual evaluation of objective type answersheets, computerised processing of result, etc.

With continuous expansion of banking industry and the PSS unit assisting them in the recruitment and promotions of employees at different levels, the PSS unit also expanded. In 1982, a Task Force comprising representatives from the Reserve Bank of India, Public Sector Banks, Banking Division (GoI) and faculty of PSS and the Director NIBM recommended formation of an autonomous institute. Thus the PSS Unit of NIBM was converted into an autonomous institute and was registered as a Society under Societies Registration Act, 1860. Thus it came into existence under the name of "Institute of Banking Personnel Selection" (IBPS) from 1st April 1984.

Institute of Banking Personnel Selection (IBPS) functions with the sound support of key words "Speed", "Accuracy" and "Confidentiality". The machine 'Optical Mark Reader' is used for scoring the answersheets used for the objective type tests given as a selection tool to the applicants seeking jobs in banking industry. This machine ensures 'speed', 'accuracy' and also the 'confidentiality' since it involves minimum human intervention.
The "Optical Mark Reader" (OMR) reads pencil marks made on a specially designed answer sheet. The machine reads through a camera. The amount of light reflected from an oval would depend on the amount of lead available on the oval. The more the amount of lead, the less the amount of reflected light, which reaches the camera. On the basis of the amount of reflected light, the machine identifies the presence or absence of a mark as per the threshold set for the purpose. The machine reads and records such marks for each oval (response area) and is used for further analysis.

The institute's functioning is supported by the sophisticated Desktop Publishing Unit, sophisticated Printing Press and well equipped Computer Department. The institute is one of the largest of any such institute in the World in the area of employment testing. The only organisation in the World, which is comparable is "Educational Testing Services" (ETS) Princeton, USA.

1.3 Need for the study:

NIBM, after introducing a selection system involving use of objective type tests in 1972, carried out various studies to establish an improved and effective, objective selection system for the banking industry. These studies were carried out between 1970 to 1979. The banks were doing their own recruitment with the help of NIBM till the introduction of Banking Service Recruitment Boards (BSRBs) in 1978. In 1978, BSRBs were introduced and the recruitment for banking industry was done by the BSRBs following uniform system under guidelines from the Banking Division, Ministry of Finance, Government of India. Though the basic selection system with written examination comprising objective tests and a descriptive paper followed by personal interview as selection tools,
remained the same. The structure of written examination was modified as decided in the periodical meetings of the Committee comprising members of BSRBs and NIBM/IBPS. These decisions were taken on the basis of experience over the years supported by analysis of data in the respective area. However, no detailed study was undertaken in past twenty years between 1980 and 2000. The review of related literature and studies revealed that there was no validity study carried out against the performance of Bank Employees during past two decades.

Therefore, it became necessary to carry out a detailed empirical study to examine the relevance of present selection system being used for the banking industry by IBPS. The present study is an attempt to examine the present selection system thoroughly, considering various aspects involved in the selection system and suggest suitable modifications in the structure of objective type part of the written examination if necessary. Ultimate aim in the process, being job-performance of the selected personnel, emphasis was on the relationship between performance on objective type tests vis-à-vis job-performance and job-satisfaction. Thus the study was meant to establish the relationship between objective type tests as a selection tool and the job-performance and job satisfaction of the selected personnel.
1.4 **Statement of the Problem:**

A critical study of the reliability and validity of the battery of selection tests with special reference to the relationship between job-performance and job-satisfaction of the banking personnel.

1.5 **Objectives of the Study:**

The present study aimed at exploring the relationship between the objective tests used as a selection tool and the job performance and job satisfaction at clerical level in banks.

Following were the major objectives of the study:

1. To determine the empirical validity and reliability of the tests.
2. To study the relationship between the performance on battery of objective type tests used for selection of bank employees and their performance at job.
3. To study the relationship between the battery of objective type tests used for selection of bank employees and their job satisfaction.
4. To study the relationship between job-performance of the bank employees and their job-satisfaction.
5. To study the effect of change in position of items in a test on the candidates' performance.
6. To suggest ways and means to improve the construction and administration of the tests and processing of the results.
1.6 Definition of terms:

A brief explanation of various terms used in this study is given below.

1. **Battery of Tests** - is the battery of four objective type tests viz. Reasoning Ability, English Language, Numerical Ability and Clerical Aptitude. Each test consists of 50 items. The battery of tests was used as a selection tool for selection of clerical cadre employees in banks.

2. **Job-Performance** - is the performance of clerical cadre employees in banks as measured by a particular instrument.

3. **Job-Satisfaction** - is the satisfaction at job of clerical cadre employees by the task assigned to them in banks as measured by a particular instrument.

4. **Job Description Index** - is the Job Description Index, a tool constructed by Smith P.C., Kendall L M & Hulin Charles for measurement of job-satisfaction. (Cranny et.al.pp.56-59).

5. **Performance Rating Proforma** - is the proforma designed by the researcher for assessment of performance of the subjects in sample.

6. **Employee** - Here the term employee refers to the persons selected and recruited for job in banks at clerical level through Banking Service Recruitment Board, Mumbai on the basis of written examination conducted in June-1998.
7. **Supervisor** - the officer to whom the subjects in the sample are reporting; also referred to as "reporting authority".

1.7 **Scope and Limitations of the Study:**

Following were the scope and limitations of the study:

1.7.1 **Scope of the study**

The present study provided scope for -

(i) studying the relevance of objective type tests in relation to the performance and satisfaction of the selected employees at job.

(ii) Examining the structure of objective type tests being used as a selection tool.

(iii) Suggesting modifications in the structure of battery of objective tests.

1.7.2 **Limitations of the study:**

The present study had following limitations:

(i) The study was restricted to the State of Maharashtra,

(ii) The candidates who did not perform well on objective type tests and therefore were not recruited in banks but who might have performed well on the job could not be considered for the study.

(iii) Scores on descriptive paper could not be considered for comparison.

(iv) Performance in interview could not be considered for comparison.
1.8 Significance of the study:

Banks play an extremely important role in the economy of the country. In the era of competition with a large number of co-operative banks, private banks and foreign banks coming into the business it has become more important for the public sector banks to progress constantly and take the leading position in the race. The performance of employees at various levels viz. officers and clerical levels contribute significantly to the performance of the bank as an organization. The employees job-satisfaction is equally important since it has direct influence on the employees performance and ultimately the performance of the organization.

The present study intended to provide input for the Banking Industry for deciding their future selection strategy. Its relationship with the job-performance and the job-satisfaction of the candidates recruited through these tests will strengthen the role of objective tests in the selection process. At the same time the study will also throw light on the scope for improvement in the tests. Further, though BSRBs have been abolished and Public Sector Banks are handling their own recruitment process, objective type tests may continue to form an important part of the selection process being followed by all the public sector banks.
1.9 Epilogue:

In this chapter the researcher has discussed about the selection process of bank employees with greater emphasis of selection of clerical employees and the importance of objective type tests as a part of selection process. The researcher has also discussed about the job-performance, job-satisfaction and the tools to measure them.

In the next chapter a review of the literature and studies carried out in the related areas will be presented.