THE VALIDITY OF THE ASSESSMENT CENTRE IN PREDICTING MANAGERIAL PERFORMANCE OF BUSINESS DEVELOPMENT MANAGERS

by

EMéZIA LE ROUX

Submitted in partial fulfillment of the requirements for the degree

MAGISTER COMMERCII (HUMAN RESOURCE MANAGEMENT)

in the

FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

at the

UNIVERSITY OF PRETORIA

PRETORIA APRIL 2004

CONTENTS

Declaration ............................................................................................................................................ ii
Acknowledgement ............................................................................................................................... iii
Table of Contents ............................................................................................................................... iv
List of Tables ....................................................................................................................................... v
List of Figures ...................................................................................................................................... vi
List of Appendices .............................................................................................................................. vii
Abstract ........................................................................................................................................ iviii
Appendices
References
DECLARATION

I, Emézia le Roux, hereby declare that this study project is my own original work and that all sources have been accurately reported and acknowledged, and that this document has not previously in its entirety, or in part, been submitted to any university in order to obtain an academic qualification.

E. le Roux

15 April 2004
ACKNOWLEDGEMENTS

I wish to express my sincere appreciation for the assistance received from the following people in planning and conducting the research project, as well as completing this dissertation. Their support and meaningful comments have made this experience one of great educational value to me.

Deon Steyn, my promotor, provided both impetus and constructive guidance throughout the various stages of this exacting task. Dr. Pieter Schaap gave generously of his time and expertise to assist me in the statistical analysis of the study, as well as constructive advice on the presentation of the findings on the study. Johan Benade offered useful suggestions that led to the conducting of this research project, and in turn, initiated further studies. Wiehann Rademan also offered valuable suggestions after completion of the different phases of the research project. I also wish to thank Zetta de Greeff for tending to the grammatical aspects and technical layout of the text.

I am deeply indebted to my father, mother and late sister for their unfailing interest, encouragement and assistance, especially during the final editing phase of this dissertation. The encouragement of the rest of my friends, especially Rozette van Niekerk, Margery Fourie and Jeanine Steenkamp, is greatly appreciated. I also wish to thank all the other friends and colleagues who believed in me, and for their continuous prayers and support towards accomplishing this task.

Finally, glory to our Heavenly Father, who makes all things possible.
# TABLE OF CONTENTS

## CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION ........................................................................................................ 1-1  
1.2 BACKGROUND ....................................................................................................... 1-3  
1.3 PROBLEM STATEMENT .................................................................................... 1-5  
1.4 PURPOSE OF THE STUDY ............................................................................. 1-5  
1.5 SCOPE OF THE STUDY ................................................................................... 1-6  
1.6 LAYOUT OF THE RESEARCH REPORT .......................................................... 1-6  
  1.6.1 Chapter 1: Introduction ........................................................................ 1-6  
  1.6.2 Chapter 2: Theoretical perspectives on the assessment centre method .... 1-6  
  1.6.3 Chapter 3: Responses to assessment centres ........................................... 1-6  
  1.6.4 Chapter 4: The Business Development Manager .................................... 1-7  
  1.6.5 Chapter 5: The selection process .............................................................. 1-7  
  1.6.6 Chapter 6: Hypotheses ............................................................................ 1-7  
  1.6.7 Chapter 7: Research methodology ............................................................ 1-7  
  1.6.8 Chapter 8: Research results ................................................................. 1-7  
  1.6.9 Chapter 9: Conclusions .......................................................................... 1-8  
  1.6.10 Chapter 10: Recommendations .............................................................. 1-8  
1.7 SUMMARY ......................................................................................................... 1-8  

## CHAPTER 2: THEORETICAL PERSPECTIVES ON THE ASSESSMENT CENTRE METHOD

2.1 INTRODUCTION ..................................................................................................... 2-1  
2.2 DEFINITIONS ..................................................................................................... 2-1  
  2.2.1 Performance assessment ........................................................................ 2-1  
  2.2.2 Assessment ................................................................................................. 2-3  
  2.2.3 Assessment centre .................................................................................... 2-3  
  2.2.4 Assessors ................................................................................................. 2-4  
  2.2.5 Situational exercises ............................................................................... 2-4  
  2.2.6 Simulations .............................................................................................. 2-5  
  2.2.7 Competencies and dimensions ............................................................... 2-6  
  2.2.8 Rating scales ......................................................................................... 2-8  
  2.2.9 Predictive validity .................................................................................. 2-10  
  2.2.10 Managerial success ............................................................................ 2-11  
2.3 HISTORICAL OVERVIEW OF THE ASSESSMENT CENTRE ..................... 2-13  
  2.3.1 The OSS experience ............................................................................ 2-13  
  2.3.2 Industrial application ............................................................................ 2-15  
2.4 OBJECTIVES OF THE ASSESSMENT CENTRE ............................................. 2-19  
  2.4.1 Principles of prediction ........................................................................ 2-19  
  2.4.2 Principles of diagnosis .......................................................................... 2-21  
  2.4.3 Principles of training relevant to a developmental assessment centre .... 2-22  
  2.4.4 Specific objectives of the assessment centre ......................................... 2-23  
2.5 THE RELATIONSHIP BETWEEN HUMAN RESOURCE MANAGEMENT SYSTEMS AND ORGANISATIONAL CLIMATE ........................................ 2-25  
2.6 ESSENTIAL FEATURES OF AN ASSESSMENT CENTRE ...................... 2-27  
2.7 NON-ASSESSMENT CENTRE ACTIVITIES .............................................. 2-30  
2.8 A TYPICAL ASSESSMENT CENTRE .......................................................... 2-31
2.9 DIMENSIONS TO BE ASSESSED

2.9.1 General principles

2.9.2 Job analysis

2.9.3 Types of dimensions

2.9.3.1 Potentialities

2.9.3.2 Skills

2.9.3.3 Other attributes

2.9.4 Determining the number of dimensions

2.10 SITUATIONAL EXERCISES

2.10.1 Types of situational exercises

2.10.1.1 Interview simulations

2.10.1.2 Fact-finding

2.10.1.3 Written case analysis

2.10.1.4 Oral presentation

2.10.1.5 Leaderless group discussion

2.10.1.6 Assigned-leader group task

2.10.1.7 In-basket

2.10.1.8 Business games

2.10.2 Integrated Exercises

2.10.3 Determining the number of exercises

2.10.4 Integrating other assessment devices with situational exercises

2.11 OBSERVING AND CLASSIFYING BEHAVIOUR

2.11.1 Introduction to two theories of social judgement

2.11.2 Steps in the behaviour reporting method

2.11.2.1 Observation and recording of behaviour

2.11.2.2 Classification of behaviour

2.11.2.3 Presentation of reports

2.11.2.4 Preliminary ratings of overall dimension performance

2.11.2.5 Integration procedures

2.11.3 Alternative methods of recording and integrating observations

2.11.3.1 Within-exercise dimension rating method

2.11.3.2 Assessor reliability

2.11.3.3 Relationship between within-exercise dimension ratings and other measures

2.11.3.4 Construct validity

2.12 GROUP DISCUSSION OF ASSESSMENT INFORMATION

2.12.1 Final overall dimension ratings

2.12.2 Overall assessment rating

2.12.3 Alternative methods of data integration

2.12.3.1 Deriving final dimension ratings statistically

2.12.3.2 Deriving overall assessment ratings statistically

2.12.3.3 Combining final overall dimension ratings

2.12.3.4 Combining preliminary overall ratings

2.12.4 The process of group decision-making

2.12.4.1 Disadvantages of group decision-making

2.12.4.2 Advantages of group decision-making

2.12.4.3 Factors affecting group effectiveness

2.13 PROVIDING FEEDBACK OF ASSESSMENT CENTRE RESULTS

2.13.1 Matching feedback to assessment purpose

2.13.2 Rights of the individual and responsibilities of the organisation

2.13.2.1 Employee rights

2.13.2.2 Organisational interests

2.13.2.3 Other considerations
CHAPTER 3: RESPONSES TO ASSESSMENT CENTRES

3.1 INTRODUCTION .......................................................................................................................... 3-1
3.2 STATUS TO ASSESSMENT CENTRES ......................................................................................... 3-2
    3.2.1 Response by participants ................................................................................................... 3-2
    3.2.2 Response by assessors ..................................................................................................... 3-2
    3.2.3 Response from unions ..................................................................................................... 3-3
    3.2.4 Response from the courts .................................................................................................. 3-3
3.3 VALIDITY OF ASSESSMENT CENTRES ...................................................................................... 3-5
    3.3.1 Evidence of content validity ............................................................................................. 3-7
    3.3.2 Evidence of predictive validity .......................................................................................... 3-9
    3.3.3 Evidence of construct validity ........................................................................................... 3-14
3.4 WHY DO ASSESSMENT CENTRES WORK? .................................................................................. 3-17
    3.4.1 R. Klomoski & M. Brickner .................................................................................................. 3-17
        3.4.1.1 Traditional explanation ............................................................................................... 3-18
        3.4.1.2 Actual criterion contamination .................................................................................... 3-18
        3.4.1.3 Subtle criterion contamination ...................................................................................... 3-18
        3.4.1.4 Self-fulfilling prophecy ................................................................................................ 3-18
        3.4.1.5 Performance consistency ............................................................................................. 3-18
        3.4.1.6 Managerial intelligence ............................................................................................... 3-19
    3.4.2 D.S. Holmes .......................................................................................................................... 3-19
        3.4.2.1 Valid overall assessment ratings .................................................................................. 3-20
        3.4.2.2 Predicting behaviour from behaviours ......................................................................... 3-20
        3.4.2.3 Safety in numbers ........................................................................................................ 3-20
        3.4.2.4 Advantage of working in groups .................................................................................. 3-21
        3.4.2.5 Practice makes perfect .................................................................................................. 3-21
        3.4.2.6 Use of behavioural data .................................................................................................. 3-21
        3.4.2.7 Behavioural dimensions ............................................................................................... 3-21
        3.4.2.8 Better vision .................................................................................................................. 3-22
    3.4.3 R. Wood & T. Payne .............................................................................................................. 3-22
        3.4.3.1 Validity evidence ........................................................................................................... 3-23
        3.4.3.2 Realistic job preview ..................................................................................................... 3-24
        3.4.3.3 Candidate reaction ........................................................................................................ 3-24
        3.4.3.4 Involvement of line managers ....................................................................................... 3-24
        3.4.3.5 Strategic value ................................................................................................................. 3-25
    3.4.4 W.C. Byham ........................................................................................................................... 3-25
        3.4.4.1 Accuracy of assessment centre method ......................................................................... 3-25
        3.4.4.2 Other indirect benefits ................................................................................................... 3-26
3.5 WHY DO ASSESSMENT CENTRES FAIL? .................................................................................. 3-28
    3.5.1 G.C. Thornton ...................................................................................................................... 3-28
        3.5.1.1 Poor planning ............................................................................................................... 3-28
        3.5.1.2 Time-consuming preliminary work ................................................................................. 3-28
        3.5.1.3 Unrealistic view on assessor training .............................................................................. 3-29
        3.5.1.4 Misusing of assessment results ....................................................................................... 3-29
        3.5.1.5 Bad assessment results .................................................................................................. 3-29
        3.5.1.6 Lack of senior management support ............................................................................... 3-29
    3.5.2 R. Wood & T. Payne .............................................................................................................. 3-30
        3.5.2.1 Cost ............................................................................................................................... 3-30
        3.5.2.2 Over engineering ............................................................................................................ 3-31
        3.5.2.3 Skimping on assessor training ....................................................................................... 3-31
CHAPTER 4 : THE BUSINESS DEVELOPMENT MANAGER

4.1 INTRODUCTION...........................................................................................................4-1
4.2 STRUCTURE ....................................................................................................................4-1
4.3 JOB PROFILE ...............................................................................................................4-4
  4.3.1 Context ....................................................................................................................4-4
  4.3.2 Customers ................................................................................................................4-5
  4.3.3 Outputs ....................................................................................................................4-5
  4.3.4 Competencies ..........................................................................................................4-6
    4.3.4.1 Psychomotor competence set ..........................................................................4-6
    4.3.4.2 Behavioural competence set ...........................................................................4-6
    4.3.4.3 Cognitive competence set ...............................................................................4-7
4.4 ORIENTATION AND SUPPORT ..................................................................................4-7
4.5 TRAINING AND DEVELOPMENT ...............................................................................4-9
  4.5.1 Plans and goals of the business unit .......................................................................4-10
  4.5.2 Recruit, train and develop for growth .....................................................................4-11
  4.5.3 Promoting sales ......................................................................................................4-11
  4.5.4 Building and guarding the customer base ...............................................................4-12
  4.5.5 Business leadership ..............................................................................................4-12
4.6 REMUNERATION AND RECOGNITION ....................................................................4-13
4.7 SUMMARY ....................................................................................................................4-16
### CHAPTER 5: THE SELECTION PROCESS

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 INTRODUCTION</td>
</tr>
<tr>
<td>5.2 BEST PRACTICE IN LARGE-SCALE ASSESSMENTS</td>
</tr>
<tr>
<td>5.3 VISION AND STRATEGIC INTENTIONS OF THE ASSESSMENT CENTRE</td>
</tr>
<tr>
<td>5.4 THE SELECTION PROCESS</td>
</tr>
<tr>
<td>5.5 THE SELECTION STRATEGY</td>
</tr>
<tr>
<td>5.6 INTEGRATION OF ASSESSMENT DATA</td>
</tr>
<tr>
<td>5.7 FEEDBACK ON ASSESSMENT RESULTS</td>
</tr>
<tr>
<td>5.8 SUPPORT ACTIVITIES</td>
</tr>
<tr>
<td>5.9 SUMMARY</td>
</tr>
</tbody>
</table>

### CHAPTER 6: HYPOTHESES

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 INTRODUCTION</td>
</tr>
<tr>
<td>6.2 DEFINITIONS</td>
</tr>
<tr>
<td>6.3 RESEARCH HYPOTHESES</td>
</tr>
<tr>
<td>6.4 SUMMARY</td>
</tr>
</tbody>
</table>

### CHAPTER 7: RESEARCH METHODOLOGY

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 INTRODUCTION</td>
</tr>
<tr>
<td>7.2 RESEARCH STRATEGY</td>
</tr>
<tr>
<td>7.2.1 Field-study</td>
</tr>
<tr>
<td>7.2.2 Observation with controlled stimulus</td>
</tr>
<tr>
<td>7.3 DATA COLLECTION</td>
</tr>
<tr>
<td>7.4 STATISTICAL ANALYSIS AND COMPUTATIONS</td>
</tr>
<tr>
<td>7.4.1 Descriptive statistics</td>
</tr>
<tr>
<td>7.4.2 Correlation coefficients</td>
</tr>
<tr>
<td>7.4.3 Factor analysis</td>
</tr>
<tr>
<td>7.4.4 Multiple regression analysis</td>
</tr>
<tr>
<td>7.5 LIMITATIONS</td>
</tr>
<tr>
<td>7.6 KEY ASSUMPTIONS</td>
</tr>
<tr>
<td>7.7 SUMMARY</td>
</tr>
</tbody>
</table>

### CHAPTER 8: RESEARCH RESULTS

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1 INTRODUCTION</td>
</tr>
<tr>
<td>8.2 RESULTS AND DISCUSSION</td>
</tr>
<tr>
<td>8.2.1 Descriptive statistics</td>
</tr>
<tr>
<td>8.2.1.1 Sample characteristics</td>
</tr>
<tr>
<td>(i) Region</td>
</tr>
<tr>
<td>(ii) Race</td>
</tr>
<tr>
<td>(iii) Gender</td>
</tr>
<tr>
<td>(iv) Appointment date</td>
</tr>
<tr>
<td>(v) Market focus</td>
</tr>
<tr>
<td>(vi) Age</td>
</tr>
</tbody>
</table>
8.2.1.2 Descriptive statistics for assessment centre and performance variables ..........................................................8-4
   (i) Assessment centre scores .................................................................................................................................8-4
   (ii) Composite behavioural scores .........................................................................................................................8-5
   (iii) Score point .........................................................................................................................................................8-6
   (iv) Weighted point .................................................................................................................................................8-6
8.2.2 Correlation coefficients .......................................................................................................................................8-7
8.2.3 Factor analysis ....................................................................................................................................................8-10
   8.2.3.1 Assessment centre variables .........................................................................................................................8-10
   8.2.3.2 Behavioural performance variables .............................................................................................................8-12
8.2.4 Multiple regression analysis ...............................................................................................................................8-13
   8.2.4.1 Assessment centre and Score point relationship ...........................................................................................8-14
   8.2.4.2 Assessment centre and Weighted point relationship .................................................................................8-15
   8.2.4.3 Assessment centre and composite behavioural score relationship ..............................................................8-15
   8.2.4.4 Behavioural performance and Score point relationship .............................................................................8-16
   8.2.4.5 Behavioural performance and Weighted point relationship .....................................................................8-17
8.3 SUMMARY OF FINDINGS AND TESTING OF HYPOTHESES ..............................................................................8-18
8.4 COMPARISON WITH PREVIOUS RESEARCH .....................................................................................................8-22
8.5 SUMMARY ............................................................................................................................................................8-26

CHAPTER 9 : CONCLUSIONS

9.1 INTRODUCTION ....................................................................................................................................................9-1
9.2 CONCLUSIONS .....................................................................................................................................................9-1
9.3 SUMMARY ............................................................................................................................................................9-5

CHAPTER 10 : RECOMMENDATIONS

10.1 INTRODUCTION ................................................................................................................................................10-1
10.2 RECOMMENDATIONS .......................................................................................................................................10-1
10.3 FUTURE CHALLENGES ....................................................................................................................................10-3
10.4 BARRIERS TO ADVANCEMENT IN ASSESSMENT ..........................................................................................10-7
   10.4.1 Developmental assessment .............................................................................................................................10-8
   10.4.2 Assessing dimensions for the "Manager of the Future" ............................................................................10-9
10.5 CONTINUED RESEARCH EFFORTS .................................................................................................................10-10
10.6 SUMMARY ........................................................................................................................................................10-11
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLES</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHAPTER 8</strong></td>
<td></td>
</tr>
<tr>
<td>Table 8.1</td>
<td>Sample Characteristics</td>
</tr>
<tr>
<td>Table 8.2</td>
<td>Normal Distribution of Scores on a Five-point Scale</td>
</tr>
<tr>
<td>Table 8.3</td>
<td>Pearson Inter-correlations of Assessment and Performance Scores</td>
</tr>
<tr>
<td>Table 8.4</td>
<td>Regression Analysis: Assessment Centre and Score Point Relationship</td>
</tr>
<tr>
<td>Table 8.5</td>
<td>Regression Analysis: Assessment Centre and Weighted Point Relationship</td>
</tr>
<tr>
<td>Table 8.6</td>
<td>Regression Analysis: Assessment Centre and Composite Behavioural Score Relationship</td>
</tr>
<tr>
<td>Table 8.7</td>
<td>Regression Analysis: Behavioural Performance and Score Point Relationship</td>
</tr>
<tr>
<td>Table 8.8</td>
<td>Regression Analysis: Behavioural Performance and Weighted Point Relationship</td>
</tr>
</tbody>
</table>
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURES</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHAPTER 2</strong></td>
<td></td>
</tr>
<tr>
<td>Figure 2.1</td>
<td>Frequency of Use of Various Types of Situational Exercises</td>
</tr>
<tr>
<td>Figure 2.2</td>
<td>A Continuum of Human Attributes</td>
</tr>
<tr>
<td>Figure 2.3</td>
<td>Parallel Processing of Assessment Centre Results</td>
</tr>
<tr>
<td>Figure 2.4</td>
<td>Serial Processing of Assessment Centre Results</td>
</tr>
<tr>
<td><strong>CHAPTER 3</strong></td>
<td></td>
</tr>
<tr>
<td>Figure 3.1</td>
<td>Illustration of a Variable Correlating with the Validity of Assessment Centres</td>
</tr>
<tr>
<td><strong>CHAPTER 8</strong></td>
<td></td>
</tr>
<tr>
<td>Figure 8.1</td>
<td>Descriptive Statistics for Assessment Centre and Performance Variables</td>
</tr>
<tr>
<td>Figure 8.2</td>
<td>Factor Analysis: Assessment Centre Variables</td>
</tr>
<tr>
<td>Figure 8.3</td>
<td>Factor Analysis: Behavioural Performance Score</td>
</tr>
</tbody>
</table>
LIST OF APPENDICES

APPENDICES

CHAPTER 2

Appendix A: Table 2.1 Comparison of Assessment Centres ............................................. 2-23
Appendix B: Table 2.2 Percentage of Assessment Centres Assessing ............................ 2-40
Appendix C: Table 2.3 Comparison of two Theories of Social Judgement ............................ 2-55
Appendix D: Table 2.4 Average Correlations from Validity Studies of ......................... 2-64

CHAPTER 3

Appendix E: Table 3.1 Reviews of the Predictive Validity of the Overall Assessment Rating (OAR) ................................. 3-9
Appendix F: Table 3.2 Evidence of Predictive Accuracy in the Management Progress Study ........................................ 3-10
Appendix G: Table 3.3 Comparison of Assessment Centre Features to a Typical Promotional System ........................................ 3-40

CHAPTER 4

Appendix H: Sales Management Process ........................................................................ 4-10

CHAPTER 5

Appendix I: Table 5.1 Cost Analysis of Selection Process for Business Development Managers ........................................ 5-7
Appendix J: Table 5.2 Assessment Programme for Business Development Managers ........................................ 5-7
Appendix K: Table 5.3 Assessment Competencies and Behavioural Indicators Assessed in Written Case Study ........................................ 5-8
Appendix L: Table 5.4 Competency Matrix for Business Development Managers ........................................ 5-9
Appendix M: Table 5.5 Assessment Competencies and Behavioural Indicators Assessed in Leaderless Group Discussion, In-Basket and Coaching Interview Simulation ........................................ 5-9

CHAPTER 7

Appendix N: Purpose of Performance Evaluation Initiative For Business Development Managers ........................................ 7-5
Appendix O-1: Business Development Manager: Performance Evaluation (Original Questionnaire Template) ........................................ 7-5
# LIST OF APPENDICES

<table>
<thead>
<tr>
<th>APPENDICES</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix O-2: Business Development Manager: Performance Evaluation (Questionnaire Populated in Perception Computer Programme)</td>
<td>7-5</td>
</tr>
</tbody>
</table>

ABSTRACT

THE VALIDITY OF THE ASSESSMENT CENTRE
IN PREDICTING MANAGERIAL PERFORMANCE
OF BUSINESS DEVELOPMENT MANAGERS

by

EMéZIA LE ROUX

LEADER : G.J. Steyn
DEPARTMENT : Human Resource Management
DEGREE : M Com (Human Resource Management)

Having recognised the need to keep abreast and meeting the demands of the changing business environment, a well-known insurance company in South Africa (referred to as “the Company”), decided in October 2000 to restructure the advisers’ channel within its sales business unit. Several major challenges, such as growth in focused market share, growth in premium income, growth in volume, profitable distribution, and a high-performance culture, had to be addressed.

All Regional Managers, Branch Managers and Assistant Branch Managers within the Company were affected by this business decision. After the consultation process had been finalised, 183 employees were given the opportunity to apply for 86 Business Development Manager positions nationally. The selection criteria rested on a competency-based evaluation process. Each candidate attended a one-day assessment centre, comprising of a leaderless group discussion exercise, an in-basket, a coaching interview and a written case study, measuring 13 different competencies. Specific production standards with reference to growth in
premium income, growth in volume and growth in manpower were also considered as part of the selection criteria. Irrespective of these appointments, a number of black Business Development Managers from the external market, were also appointed to the Company on a national basis since June 2001, due to further expansions in the black upcoming market. The total number of Business Development Managers appointed by the end of December 2002, amounted to 116.

The rationale behind the position of Business Development Manager is to become more creative in order to generate business, add value and ensure organisational success. The ability to convert ideas into business within a sales franchise environment, is an important requirement for a Business Development Manager. This will result in increased volumes, growth and market share which is critical for the survival of the Company. A team of 15-20 Advisers supports the Business Development Manager to achieve these business objectives.

The recently passed Employment Equity Act 1998 states clearly that psychometric testing and other similar assessments of an employee are prohibited, unless proven to be scientifically valid, fairly applicable to all employees, and not biased towards any employee or group. Employers must therefore, subject themselves to situation specific research with reference to psychometric properties of assessment instruments, where applicable.

No conclusive evidence is currently available to indicate that Business Development Managers, appointed since January 2001, by means of competency-based assessment procedures, are successful and meet their respective business targets. The purpose of this study, therefore, is to establish the predictive validity of a managerial assessment battery for Business Development Managers within the Company. This will determine whether the competencies identified, and the assessment instruments used during the evaluation process, is projecting a clear indication of managerial potential amongst Business Development
Managers, as well as the successful achievement of business results. The vital question regarding specific competencies essential in appointing successful Business Development Managers, will be identified and well researched.

Furthermore, evidence of the predictive validity of assessment instruments, is essential in determining the level of accuracy with which work-related behaviour is predicted. The strength of the statistical relationship between a predictor score (the assessment centre results) and a criterion score (the work-performance results) indicates the predictive validity of the measure.

The sample for this research study consisted of a convenience sample of 92 managers, who participated in an assessment centre evaluation for managerial competencies, during the period 2000 to 2002. Assessment centre ratings were measured against three different variables. The first variable was a business indicator known as Score point, calculated for each Business Development Manager as on 31 December 2002. This performance outcome indicator is used as an internal recognition system where intermediaries score points, based on the volume of business they generated during a specific period. Another business indicator known as Weighted point, which is also an internal measurement system, where different elements of a Business Development Manager’s performance is measured and weighted, was calculated for each Business Development Manager as on 31 December 2002. In November 2002 performance ratings were conducted by each Provincial Manager, evaluating his/her team of Business Development Managers respectively, which was seen as the third variable for the purpose of this study. This evaluation was based on several behavioural competencies as demonstrated by the Business Development Manager in his/her work environment. These 13 competencies were the same 13 dimensions measured in the managerial assessment centre, conducted during the selection process.
For the purpose of this research report, “Score” or “Score point” refers to a performance outcome indicator, used as an internal recognition system in this particular insurance company, whereas “score” refers to the result(s) obtained by a candidate, applying for a Business Development Manager position in the Company, who attends a managerial assessment centre as part of the selection process.

Biographical and other company-related information was collected for each Business Development Manager and captured, together with assessment centre data and performance data. The data was screened and statistically analysed using descriptive statistics, correlation coefficients, factor analysis and multiple regression analysis.

Based on the sample, the Coastal region was statistically the best represented sub-group at 33%. The remaining percentage (67%) of cases was more or less equally distributed amongst the other regions. The white group constituted 85% of the sample, followed by the black group at 12%. The coloured and Indian groups were least represented, at 2% and 1% respectively. Male Business Development Managers, representing 97% of the sample, dominated the sample. The age of the sample group ranged between 37 and 62 years, with an average age of 46 years. The majority of the Business Development Managers (85%) were appointed on 1 January 2001. The rural market group (32%) was the best represented sub-group in the sample, followed by the self-employed group (28%), the salaried group (24%) and the emerging market group (16%).

The results obtained in the study, compared well to the results of similar studies conducted elsewhere. The validity of the assessment centre varied between low to moderate and high in predicting managerial performance in accordance with the Weighted point \( R = 0.251 \), Score point \( R = 0.414 \) and behavioural performance \( R = 0.499 \). It can therefore be concluded, that the predictive validity of the assessment centre is superior in terms of behaviour related managerial performance, compared to organisational
outcome variables. These results are consistent with what is to be expected from behaviourally based assessment instruments.

A statistical significant multiple correlation of 0.519 was also obtained between the supervisor’s rating of behavioural performance and the Score point, signifying that performance in terms of work behaviour, relates strongly to tangible performance outcomes as well. This finding indicates that high managerial ratings, correlates with a high Score point.


Factor analyses revealed that the behavioural competencies included in the managerial assessment centre, could be divided in two main components. The first and most important component can broadly be defined as embedded entrepreneurial and leadership qualities. The component consists of Entrepreneurship, Leadership Skills, Coaching Skills, Action Orientation, Judgement and Decisiveness, Assertiveness, Self-motivation and Energy. The second component can be described as essential qualities for effective day-to-day business management and consists of Performance Management Skills, Business Operation Skills, Business Strategy Skills, Financial Management Skills and Adaptability. The two components explain a large proportion of the differences in
behavioural competencies that were observed for Business Development Managers.

The results of the factor analysis performed on the supervisor’s rating of behavioural performance, were very similar to the assessment centre results. The two main components were largely replicated and indicate that the behavioural competencies and their interrelationships are well understood and manifested in a consistent manner, for both the assessment centre evaluations and supervisor performance ratings. The results therefore, revealed that the supervisor’s rating of performance is projecting a clear indication of the overall performance of the Business Development Managers. The evidence acquired by means of factor analysis, provides additional credibility to the findings of the study.

A limiting factor in validity studies is the difficulty to determine the extent to which performance ratings are biased. The same applies to this study. Should behavioural performance ratings in future form part of the performance ratings of Business Development Managers, Provincial Managers must be sensitised to the limiting effect of bias. The effect of central tendency and/or the selection ratio also appears to limit the score variance of the assessment centre, which jeopardises the discrimination value of the Provincial Managers’ rating of behavioural performance. The use of a seven-point rating scale instead of a five-point rating scale could be considered to provide more scope for score variation, and consequently, result in better discrimination of performance levels.

Another limitation is that the Weighted point was characterised by a large number of extreme scores, where the distribution deviated significantly from the normal distribution. It is recommended that the process to which the Weighted point is compiled, be reviewed prior to future use in similar studies.

A further suggestion is, that by using assessment centre scores in combination with objective tests and structured interviewing techniques, the validity of the selection battery, used by the Company in appointing
Business Development Managers, is expected to increase significantly. Proven dimensions identified in the study, must be evaluated and re-defined in the form of behavioural indicators, and weights allocated for each dimension in terms of importance. These well-proven dimensions must continually be monitored and rewarded in performance management, and be linked to formal and informal development initiatives. The assessment of behavioural performance dimensions should also be included as part of the routine assessment of Business Development Managers, as these dimensions could contribute significantly to an understanding of the effectiveness of behaviourally based assessments, as well as that of the relationship between behavioural performance and tangible performance outcomes.

In conclusion, the managerial assessment centre appears to have significant predictive validity. Future performance of individuals, can be predicted substantially more accurately, when applying the results of the assessment centre as part of the selection process, compared to not utilising the assessment centre at all. Research evidence suggests that, when applied correctly, assessment centre evaluations can contribute significantly to effective employment decisions. The application of the assessment centre could result in substantial benefits for this insurance company, in respect of increased productivity and reduced employment costs.
CHAPTER 1

INTRODUCTION
1.1 INTRODUCTION

South Africa is going through very rapid and complex social, political and economical changes, which is bound to have a profound impact on the role and function of managers. The scarcity of skilled managers and future demands for skilled managers, are placing a heavy burden on organisations to select and develop managerial potential of all races.

Behavioural-based assessment is not a choice left to the goodwill of top management, a luxury of profitable corporations, or a fringe benefit of large organisations. It is a requirement of the economic system, a process imposed on a company as a result of organisational growth, changing technology, and a changing environment in the broader sense. The systematic assessment of managerial talent is one of the primary tasks of any organisation, for its survival in an increasingly changing environment.

An assessment centre is an evaluation process, which can be used to identify the future potential of employees and job candidates (Seegers, 1997, p 3). The assessment centre method consists of the observation of candidates carrying out a variety of assignments, individually or in a group, over a period of several days. The method is systematic, effective and reliable. It is designed to enable personnel officers, career advisors and especially line managers, to determine which qualities are essential for successful job performance, to evaluate people and identify future potential.

The use of the assessment centre method has increased rapidly over the past decades. Of all the first versions of the assessment centre method, American Telephone and Telegraph’s (AT&T) method was the quickest to gain international recognition. Their method bridged all types of cultural gaps and spread to South Africa, Australia, Great Britain and Japan, as well as Germany, Scandinavia, the Philippines and even Singapore (Seegers, 1997, p 15).
The growing interest in this method, is as a result of the following factors as described by Seegers (1997, p 15):

- There is an increasing demand for a reliable method to identify the strengths and weaknesses of a workforce, in order to use training scheme budgets efficiently and effectively.
- Techniques used in selection and promotion procedures should be objective and non-discriminative.
- There is a growing awareness that not only personnel officers, but also managers should be responsible for the placement of staff in their departments.
- There is a demand for assessment methods that are geared towards results.

During the seventies, various articles emphasised the “over-competitive side” of the assessment centre method (Seegers, 1997, p 16). This is not in fact a very prominent aspect. Systematic evaluations of assessment programmes have been executed and the results showed that candidates found the method challenging, fascinating, fair and educational, and hardly ever threatening, over-competitive or boring. Managers in Europe and America do not object to the group aspect of the methodology. Candidates compete against themselves rather than against each other, and a little functional stress is not a bad thing.

According to Seegers (1997, p 16) the following matters are considered relevant to fair evaluation of personnel:

- The evaluation criteria should be clearly written and candidates should be informed about them.
- The system should use a clear scale of assessment.
- Assessors should be able to observe behaviour under assessment.
- Assessors should be able to evaluate criteria effectively.
- More than one assessor should be used where possible.
- Candidates should have the right to make an appeal.
Candidates should have the right to initiate an assessment, as in the case of promotions or transfers.

The assessment centre method complies with the first five of the above-mentioned requirements. It is not very surprising that the Equal Employment Opportunity Commission (EEOC) of the United States has described the assessment centre method as being fair.

To summarise, it seems as if the assessment centre method is both scientifically justified and practically applicable. The method is not new, it is not typically American, nor is it a passing trend, but a very useful method of bringing long-awaited changes into the personnel arena.

1.2 BACKGROUND

For the purpose of this research report, “the Company” will refer to a well-known company within the insurance industry, where the study was conducted.

Having recognised the need to keep abreast and meeting the demands of the changing business environment, a well-known insurance company in South Africa decided in October 2000 to restructure the advisers’ channel within its sales business unit.

The newly structured channel had to face the following major challenges:

- Growth in focused market share.
- Growth in premium income.
- Growth in volume.
- Profitable distribution of products.
- High-performance culture.

The objective of these changes was to create an effective working environment in which the Adviser, as owner of his or her own business, can be financially successful with the necessary management support, technology, effective processes, competitive products, and market focus.
In the creation of the business model and the appointment process of Business Development Managers, the following objectives were stated:

- Establishment of ownership.
- Increased accountability and responsibility.
- Increased market focus.
- Increased productivity.
- Focus on growth.
- Value-adding support to the Adviser.

All Regional Managers, Branch Managers and Assistant Branch Managers within the Company were affected by this business decision. After the consultation process had been finalised, 183 employees were given the opportunity to apply for 86 Business Development Manager positions nationally. All reasonable steps were taken to prevent staff from being retrenched as a result of redundancy. Where practically possible, staff was accommodated elsewhere in the Company and retrained within reasonable limits. The option of early retirement was also given to employees and restrictions were placed on external appointments.

The selection criteria rested on a competency-based evaluation process, as well as specific production standards with reference to growth in premium income, growth in volume and growth in manpower.

Since June 2001, a number of black Business Development Managers from the external market were also appointed to the Company on a national basis, due to further expansions in the black upcoming market. The total number of Business Development Managers appointed by the end of December 2002, amounted to 116.

The recently passed Employment Equity Act 1998 states clearly that psychometric testing and other similar assessments of an employee are prohibited, unless proven to be scientifically valid, fairly applicable to all employees, and not biased towards any employee or group. Employers must therefore, subject themselves to situation specific research with
reference to psychometric properties of assessment instruments, where applicable.

1.3 PROBLEM STATEMENT

The main problem is that no conclusive evidence is currently available to indicate that Business Development Managers, appointed within this insurance company since January 2001, by means of competency-based assessment procedures, are successful and meet their respective business targets.

This in turn, gives rise to the following four sub-problems:

- Is there any correlation between the assessment centre results and performance results?
- Is there any correlation between the performance results and competencies as identified in the job profile?
- Can assessment results predict good performance and success in a work-related environment?
- Do assessment centres as an evaluation instrument, have an impact on the selection process of Business Development Managers?

1.4 PURPOSE OF THE STUDY

The purpose of this study is to establish the predictive validity of a managerial assessment battery for Business Development Managers within this particular insurance company. This will determine whether the competencies identified, and the assessment instruments used during the evaluation process, is projecting a clear indication of managerial potential amongst Business Development Managers, as well as the successful achievement of business results. The vital question regarding specific competencies essential in appointing successful Business Development Managers, will be identified and well researched.

Information on the validity of instruments used for selection and developmental purposes, provide an important basis for the evaluation of
INTRODUCTION
the utility value of these managerial assessment instruments. Test validity is an important factor that determines the accuracy and quality of personnel decisions.

Furthermore, evidence of the predictive validity of assessment instruments, is essential in determining the level of accuracy with which work-related behaviour is predicted. The strength of the statistical relationship between a predictor score (the assessment centre results) and a criterion score (the work-performance results) indicates the predictive validity of the measure.

1.5 SCOPE OF THE STUDY
The study was limited to South Africa, and in particular, to a well-known company within the insurance industry, where this project was implemented.

1.6 LAYOUT OF THE RESEARCH REPORT
The research report will consist of the following main chapters:

1.6.1 Chapter 1: Introduction
An introduction to the research project, the background to the appointment of Business Development Managers in the Company, leading up to the actual problem and the purpose of the study.

1.6.2 Chapter 2: Theoretical perspectives on the assessment centre method
A comprehensive overview of definitions, concepts and ideas resulted from the problem statement, including the five key elements of the assessment centre method.

1.6.3 Chapter 3: Responses to assessment centres
A brief look at where the assessment centre method stands at present, a summary of empirical research evidence on assessment centre validity, an
explanation of why assessment centres work, the reasons why assessment centres fail, certain conditions for success, the utility of assessment centres, and a comparison between the assessment centre and other assessment procedures.

1.6.4 Chapter 4: The Business Development Manager

A background to the structure, job profile, orientation and support, training and development, remuneration and recognition of the Business Development Manager.

1.6.5 Chapter 5: The selection process

A description of the selection process and strategy in appointing Business Development Managers within the Company, integration of assessment data, providing feedback on assessment centre results, and the availability of an independent counselling service for affected employees.

1.6.6 Chapter 6: Hypotheses

Setting various hypotheses being researched.

1.6.7 Chapter 7: Research methodology

An explanation of the research strategy, method of research, processes followed in the collection and analysis of data, limitations and key assumptions of the study.

1.6.8 Chapter 8: Research results

A discussion on the findings of the statistical analysis, followed by a summary of the most important findings, testing of hypotheses, and a comparison with previous research.
1.6.9 Chapter 9: Conclusions

A summary and critical look at the main findings.

1.6.10 Chapter 10: Recommendations

Suggestions and recommendations made regarding the findings in the research, future challenges of the assessment centre, barriers to advancement in assessment, and continued research efforts.

1.7 SUMMARY

This chapter introduced the background and purpose of the study, focusing on the main- and four sub-problems. The scope of the study was explained, and a concise layout of the research report presented.

Chapter 2 will in turn, focus on theoretical perspectives with reference to the assessment centre method, reflecting an overview of definitions and concepts related to the problem statement. The five key elements of the method will be addressed, followed by responses to assessment centres in Chapter 3.
CHAPTER 2

THEORETICAL PERSPECTIVES ON THE ASSESSMENT CENTRE METHOD
2.1 INTRODUCTION

Under the controlled conditions within the assessment centre, promising candidates can be observed in action and objectively evaluated, both for specific job capabilities and for management abilities. From an assessment report, a company can get an excellent “gut feeling” whether a person will fit into its organisation in the future. It will also give a clear indication where the person will excel, and how he/she ought to adapt and develop when facing challenges up the management ladder.

However, before discussing the concept of assessment centres in detail, relevant definitions will first be reviewed and placed in perspective to this study. Thereafter, the following sub-points will be addressed:

- Historical overview of the assessment centre.
- Objectives of the assessment centre.
- Essential features of an assessment centre.
- Non-assessment centre activities.
- A typical assessment centre.
- Dimensions to be assessed.
- Situational exercises.
- Observing and classifying behaviour.
- Group discussion of assessment information.
- Providing feedback of assessment centre results.

2.2 DEFINITIONS

2.2.1 Performance assessment

Berk (1986, p ix) defined performance assessment as the process of gathering data by systematic observation for making decisions about an individual.
According to Berk (1986, p ix) there are five key elements in this definition:

- Performance assessment is a process, not a test or any single measurement device.
- The focus of this process is on gathering data, using a variety of instruments and strategies.
- The data are collected by means of systematic observation, whereby the emphasis is on direct observational techniques rather than on paper-and-pencil tests, although these tests may also be included in the assessment.
- The data are integrated for the purpose of making specific decisions, which should guide the form and substance of the assessment.
- The subject of decision-making is the individual, not a programme or product reflecting a group’s activity.

Nathan & Cascio (1986, p 3) identified two uses for a performance assessment method, such as an assessment centre or performance test. The specific performance assessment method can either be used as a predictor or as a criterion. The distinction between a predictor and a criterion is on the basis of timing. If performance assessment information is collected prior to a personnel decision, then it is a predictor. If such information is collected after a personnel decision has been made, then it is a criterion. Evidence of validity and reliability must be provided in either case.

Other related terms are often used synonymously with performance assessment. Two of these are performance appraisal and performance test. A performance appraisal is a special type of performance assessment, conducted for the expressed purpose of making decisions, whereas a performance test is a test in which performance is demonstrated through directly observable behaviour as opposed to paper-and-pencil written response (Berk, 1986, pp ix-x). Examples
include work sample tests, situational tests, in-basket tests and trainability tests.

2.2.2 Assessment

Berk (1986, p ix) also mentioned three principal features of assessment:

- Use of a variety of techniques.
- Primary reliance on observations.
- Integration of information.

In distinguishing it from psychometric measurement, Berk (1986, p ix) defined assessment in terms of clinical analysis and prediction of performance. Within this context, the emphasis is on the manner in which the data was analysed for decision-making, based more on quasi-artistic synthesis than on statistical combination.

Moses (1977, p 3) referred to the term “assessment” as a comprehensive, multifaceted view of the individual in which information from a variety of measurement techniques, is brought together.

In the psychologist’s jargon, assessment refers to information provided from a variety of techniques such as an interview, paper-and-pencil tests, intelligence tests, and personality measures, which are often used for individualised diagnostic screening and therapeutic guidance (Moses, 1977, p 4). The essence of assessment is that it brings together information from a variety of sources, and judgementally, arrives at a summary recommendation and/or description of the individual being evaluated. In this respect, assessment requires the evaluators to weigh various input sources. They may pay attention to some data, ignore others, and contrast similarities and/or differences in results.

2.2.3 Assessment centre

An assessment centre is a comprehensive, standardised procedure (not a location) in which multiple assessment techniques such as situational
exercises and job simulations (for example, business games, discussion groups, reports and presentations) are used to evaluate individuals for a variety of manpower purposes and decisions. (Byham & Thornton, 1986, pp 143-144).

Wood & Payne (1998, p 153) stated that assessment centres are characterised by multiples. Specifically, there will be multiple candidates, assessors or observers, exercises, simulations or tests, and criteria or competencies.

Moses (1977, p 3) associated an assessment centre with a system used for identifying individual strengths and weaknesses for specified purposes, such as promotion, upgrade, development, or placement.

2.2.4 Assessors

According to Thornton (1992, p 36) more than one individual or assessor is involved in evaluating the participant in the assessment centre method. Observations from multiple assessors help ensure that biases from one assessor, will not unduly influence the final outcome of the assessment process.

Assessors with several different viewpoints can make valid contributions to the evaluation of professional competencies. Assessors bring different backgrounds and experiences to the assessment task and contribute a rich variety of perspectives. Such diversity means that assessors may not always agree on the evaluation of a participant. Each of the different evaluations may be accurate and include valuable information. In fact, such differences are expected and welcomed as part of the principle of multiple assessment (Thornton, 1992, p 37).

2.2.5 Situational exercises

Situational exercises are simulations that portray important aspects of the target job (Thornton, 1992, p 35). Job analysis reveals the most common tasks, problems, and situations that job holders must face.
Situational exercises are then created to closely resemble these important features of the job situation, in order to demonstrate complex behaviours.

Figure 2.1 lists the most common situational exercises and the percentage of assessment centres that use each type (Gaugler, Bentson & Pohley, 1990). The sections following the figure describe each type, from more complex to simple, in terms of the problems that the participants have to confront. However, this order is somewhat arbitrary, since even the simplest type of exercise can be made quite complex with special instructions or content.

**Figure 2.1: Frequency of Use of Various Types of Situational Exercises**

<table>
<thead>
<tr>
<th>Level of Complexity</th>
<th>Situational Exercise</th>
<th>Percentage of Assessment Centres Using Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>More complex</td>
<td>Business games</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>In-basket</td>
<td>81%</td>
</tr>
<tr>
<td></td>
<td>Group tasks</td>
<td>Not in survey</td>
</tr>
<tr>
<td></td>
<td>Group discussions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Assigned positions</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td>- No assigned positions</td>
<td>59%</td>
</tr>
<tr>
<td></td>
<td>Oral presentation</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>Case analysis</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td>Fact finding</td>
<td>38%</td>
</tr>
<tr>
<td>Simpler</td>
<td>Interview simulation</td>
<td>47%</td>
</tr>
</tbody>
</table>


2.2.6 Simulations

Thornton (1992, p 67) is of the opinion that the observation of behaviour in situational exercises is an essential element of any assessment centre.
Situational exercises present participants with complex stimuli and call for complex responses.

The complex stimuli may include any of the following:

- Financial, demographic, and community data available to a bank executive considering a new branch in a suburb.
- A set of personnel problems including alleged safety violations, absenteeism, and thievery being reviewed by a disciplinary committee.
- A set of letters and memos in a manager’s in-basket.

The corresponding complex responses may be:

- Financial analyses and written rationale in favour of and in opposition to opening the new branch.
- Decision-making and leadership actions to help the committee find solutions.
- Written responses, assignments, and directions to subordinates or other relevant parties.

Each situational exercise is a test simulating an important aspect(s) of the job, which the participant is being considered or trained for (Thornton, 1992, p 68). Each situation allows assessors the opportunity to observe and evaluate the participant on a number of predetermined dimensions, such as written or oral communication, problem analysis, leadership and initiative.

### 2.2.7 Competencies and dimensions

Sokol & Oresick (1986, p 383) stated that a managerial job competency is an underlying generic motive, trait, aspect of self-image, social role, or body of knowledge that is manifested in one or more particular behaviours that lead to effective managerial performance in a given job. For example, the competency “persuasion” might include persuading by
appeals to other’s self-interest, the use of an influence network, and/or threats of sanctions.

To make this definition clear, it is important to understand what is meant by effective performance. Effective performance can be described as occurring when an individual’s underlying competencies lead to behaviours that meet job demands within the parameters of the organisational environment and when a specific desired result occurs (Sokol & Oresick, 1986, p 383). A strategy to determine competencies could be to identify a group of superior performers in the organisation, and gather the best information on those competencies needed for effective performance. However, what may be effective behaviour leading to effective performance in one area, will not necessarily work in another. For example, the same competencies that make a good manager of a sales force in the computer industry, are not the same as those that make an effective manager in a manufacturing plant, though there may be some overlap.

According to Thornton (1992, pp 51-52) it is critical to define the purpose of the assessment centre, which will guide the selection of dimensions, attributes or characteristics to be assessed. For selection and promotional programmes, organisations are usually interested in using an assessment centre to identify candidates who have the potential to learn and grow in a new position. Dimensions or attributes related to the person’s potential to learn, for example, basic interpersonal and problem solving skills, should be assessed. The job analysis effort should also be designed to identify those dimensions that the assessors should be focusing on in the exercises. These dimensions must be clarified with all assessors in order to have a common frame of reference for their observations.
2.2.8 Rating scales

Cascio (1991, pp 92-93) describes a procedure known as retranslation, to be followed during a performance assessment process in order to create a behaviourally anchored rating scale that is psychometrically acceptable.

Different effectiveness levels of job performance rating scales are “anchored” using behavioural examples of incumbent performance. Accordingly, performance-rating dimensions are developed with scaled behavioural examples, anchoring the different levels on the dimensions.

At an initial conference or workshop, groups of workers and/or supervisors attempt to identify and define all of the important dimensions of effective performance for a particular job. A second group then generates for each dimension, critical incidents illustrating effective, average, and ineffective performance. A third group is then given a list of dimensions and their definitions, along with a randomised list of the critical incidents, generated by the second group. Their task is to sort or locate incidents into the dimensions they best represent.

Within a performance assessment context, this procedure ensures that the meaning of both the job dimensions and the behavioural incidents selected, are specific and clear. Incidents are eliminated if there is not consensus amongst judges (usually 60-80%) regarding the dimension to which each incident belongs. Dimensions are eliminated if incidents are not allocated to them. Conversely, dimensions may be added if many incidents are allocated to the “other” category.

Each of the items within dimensions that survived the retranslation procedure, is then presented to a fourth group of judges. Their task is to place a scale value on each incident, for example, in terms of a seven- or nine-point scale from “highly effective behaviour” to “grossly ineffective behaviour”. Means and standard deviations for each incident are then calculated. Items in the final scale for each dimension must have mean
scale values covering the entire range of performance and low standard deviations.

Finally, the behaviourally anchored rating scales (BARS) are pilot-tested with a sample of supervisors who are requested to rate their subordinates on each of the dimensions. Each subordinate is rated independently by at least two raters, and the ratings are correlated to provide an estimate of inter-rater reliability. Scale scores are also inter-correlated as a check on dimension independence. Periodically thereafter, the behavioural anchors are checked for their continued relevance, clarity and scale values.

Nathan & Cascio (1986, p 5) claimed that numerical rating scales are especially useful for quantitative analyses of performance data. Major requirements for these scales are that performance dimensions and scale anchors must be defined, preferably in terms of observable behaviours. This is difficult to do for some characteristics, such as “loyalty”, “initiative” or “reasoning ability”. These are psychological traits, and their continued use in performance assessment, depends on evidence of their construct validity.

In the context of performance assessment, simply asking raters about the reasons for their numerical ratings, can suggest hypotheses that enrich the definition of a construct (Nathan & Cascio, 1986, pp 5-6). The combination of this information with evidence from content and criterion-related validity studies, can also provide considerable insight and understanding of the construct(s) in question.

According to Jacobs (1986, p 90) graphic rating scales can be used to deliver useful performance related information based on job analysis. Graphic rating scales are designed to elicit performance ratings on employees with reference to the relevant dimensions of their jobs. This goal can be accomplished by requiring raters to indicate each employee’s
standing on a numerically or verbally anchored scale, or on both. In reality, graphic rating scales can take many forms and can be classified easily according to (1) whether the job dimension is defined, or (2) whether the scale contains numbers only or a combination of numerical and verbal anchors.

### 2.2.9 Predictive validity

When people are assessed in an assessment centre, they are given several scores that indicate how well they performed in the assessment centre assignments or assessment dimensions. At the end of the assessment centre, these scores are combined to make a final score that denotes the candidate’s global effectiveness or potential. This score is referred to as the predictor. A candidate’s success in a job or career is the subject of prediction, otherwise known as the criterion (Van der Maesen de Sombreff & de Veer, 1997, p 144).

To find out if the predictors predicted the criteria accurately, the scores per predictor and criterion of a large group of participants are examined, and the correlation between the two scores are determined. According to Van der Maesen de Sombreff & de Veer (1997, p 144) this correlation is known as predictive validity. It can range from minus one to one. A validity of one is perfect and indicates that a candidate’s rank in the criterion hierarchy, corresponds exactly with his/her ranking on the predictor scale. A validity of zero means that there is no relationship between predictor and criterion, thus the same result could have been achieved by drawing lots. A negative validity indicates that someone scored high on the predictor and low on the criterion or vice versa. This would be shown in the case of a less successful manager, typifying top management behaviour. The closer to one, the better the validity.

However, a score of one is impossible. This is due to several reasons, such as the following (Van der Maesen de Sombreff & de Veer, 1997, p 145):
A person’s success at work is not only due to his/her own efforts, but also the support from managers and colleagues.

Neither the predictor nor the criterion are perfect measures, and are unreliable to a certain extent.

It is unlikely that the predictor will cover all areas of the criterion, because of the dynamics of human behaviour.

Organisations sometimes base selection decisions on the predictor’s outcome, where candidates with a high score on the predictor, have a higher chance of being employed or promoted.

Rejected candidates can not be included in the correlation, because they do not supply criterion information (Van der Maesen de Sombreff & de Veer, 1997, p 145). This decreases the validity. It is important to take note of factors, which artificially increase the validity, for example, assessors who are engaged in the assessment of someone’s performance in his/her job (criterion), who may be influenced by this person’s result in the assessment centre (predictor).

Byham & Thornton (1986, pp 157-158) is of the opinion that in order to demonstrate the effectiveness of a selection technique, it is appropriate to have evidence of predictive validity. One type of evidence can be obtained by correlating predictor scores obtained prior to hiring, with criterion measures obtained sometime after hiring, for a representative sample of the applicant population. The criterion data should be free from contamination and should give reliable and relevant measures of significant aspects of on-the-job performance. Evidence should show that the proposed selection device adds something different from other currently used or more economical techniques. The predictor should correlate significantly with the criterion and, preferably, should have practical significance in improving levels of work performance. The selection device should not predict differentially for racial and sex sub-populations.
2.2.10 Managerial success

According to Spangenberg (1990, p 1) the need for a clear model or framework of managerial competence and its assessment, stems from the very complex nature of managerial work and the variety of personal factors or competencies, that determines managerial effectiveness. It is critical to understand the differences in complexities, tasks, roles and demands between executive and supervisory level positions, as well as the differences in personal effectiveness criteria between these levels. For example, following years of research on the motivation to manage, it has been established that the need for achievement is important for managerial success at lower levels of non-technical positions, in which promotion depends more on individual contribution than it does at higher levels (Spangenberg, 1990, p 1). At higher levels where the executive must influence a vast number of people inside and outside the organisation, the need for power that is associated with “the influence game” and having impact on others, is an essential requirement at this level.

To a considerable extent, the manager of today has achieved his/her position because of knowledge, skill, and ability, and not because, the control of financial assets has entitled him/her to a seat in management. Management in this context refers to a group or class of people. However, management also connotes a distinct kind of activity or process. According to Beach (1985, p 6) management is the process of utilising material and human resources to accomplish designated objectives. It involves the organisation, direction, coordination, and evaluation of people to achieve these goals.

In the day-to-day activities of a manager, he/she devotes a high percentage of time to interact with other people. In preparing plans, he/she must consult with colleagues and subordinates. In organising, managers must work closely with subordinates to define and guide the relationships amongst them. Managers accomplish results through and
with others. They lead, persuade, and influence. They sometimes conduct and at other times, they participate in decision-making conferences. The practising manager must be skilled in the art of human relations. He/she spends a great deal of time communicating with others, mostly through face-to-face contact. In summary, the essence of management is the activity of working with people to accomplish results. It involves organising, motivating, leading, training, communicating with, and coordinating others (Beach, 1985, p 7).

Both objective and subjective indicators are frequently used to measure managerial effectiveness. They are used because they are judged relevant to the conceptual criterion. Logically, conceptual analysis must precede observation. Conceptually, effective management can be defined in terms of organisational outcomes (Cascio, 1991, p 308).

Against the background of these definitions, a short overview will be given on the history of the assessment centre in sub-point 2.3.

2.3 HISTORICAL OVERVIEW OF THE ASSESSMENT CENTRE

An article by Munchus & McArthur (1991, pp 5-9) will be the main source for the purpose of this study, revisiting the historical use of the assessment centre in management selection and development, as been described in sub-points 2.3.1 and 2.3.2.

2.3.1 The OSS experience

The technique has its roots in methods developed in the late 1930’s by German military psychologists and later utilised by the British for officer selection. Further development and refinement of the method occurred during its use for the selection of espionage agents by the United States Office of Strategic Services (OSS), from October 1943 until the project’s conclusion in 1948 with the final report, known as “Assessment of Men”.

2 - 13
Several aspects of the setting, in which this work was performed, proved to be ideal for establishing empirical foundations of the assessment centre method. One of these environmental factors was that the exact nature of the assignments that the agents would be given, was unknown. This meant that the specific skills required for success could not be defined, and therefore could not be assessed. This caused the OSS to centre its efforts on the testing and evaluation process itself and removed preoccupation with the job description. The OSS programme strove to provide an assessment of mankind as a whole, the general structure of his being, and his strengths and weaknesses. This opens assessment of a person's general characteristics as the basis of the assessment process, and acknowledges the multifaceted nature of personality.

Another aspect of the work performed by the OSS, was the extreme secrecy that surrounded the project. This secrecy, and the degree, to which it was maintained, meant that the assessors did not know the respondents' real name, position, or personal history. This aspect removed many possible biasing factors from the assessing process and, as a result, enhanced the scientific purity of the studies.

The final major factor bearing on the nature of the assessing work performed by the OSS, was the historical period in which it was implemented and the end use of the information. The programme was conducted by a government agency for selecting espionage agents during wartime. This meant that, owing to the importance of the missions to be performed by the respondents, the assessing work was considered critical to the outcome of the war itself, and therefore accuracy was paramount. An additional impact of this factor was that expense was not an element bearing on decision-making in the operation of the programme.

During its period of operation, 5 391 recruits were assessed by the programme. Additionally, each successful recruit was subjected to performance appraisal upon completion of an assignment by his/her
superior officer, again before reassignment, and finally upon return to the United States. This appraisal process supplied extensive feedback on selection validity.

Subsequent studies of the OSS assessment programme showed that, at one training centre, if random selection had been employed, 63% of decisions would have been correct, compared to 77% which were correct in actuality. At another OSS training centre where a possible 66% of correct decisions were randomly selected, only 84% were actually correct decisions.

The assessment programme of the OSS was concluded in 1948 with the publication of the report “Assessment of Men”. It included numerous recommendations by the staff for future assessment centres.

2.3.2 Industrial application

After conclusion of the OSS programme, it was succeeded by 10 years of minor studies in American military, government and clinical psychology. The establishment of the first operational industrial assessment centre at American Telephone & Telegraph (AT&T) by Douglas W. Bray and Robert K. Greenleaf was considered to be the next landmark in the mid 1950’s. The assessment centre method was used as an evaluation tool in the ambitious research project known as the Management Progress Study, which was initiated to trace the progress and growth of a large sample of young business managers. The results from this research were disseminated amongst the professional industrial psychologist community and led to the establishment of centres at firms such as IBM, Sears and General Electric.

The next phase of work on assessment centres was initiated by the 1964 publication of The Personnel Job in a Changing World, in which Dr. Douglas W. Bray presented a description of the AT&T assessment centre method and the results of validity studies. This publication elicited
considerable interest and resulted in the establishment of assessment centres at other large American corporations.

Interest in the assessment centre method grew slowly between 1969 and 1973, during which general articles in various periodicals and the establishment of consulting companies specialising in the technique, heightened interest in the “new method”. In 1969 an organisation of industrial psychologists, The Assessment Center Research Group, was formed. In 1973 Development Dimensions sponsored the first International Congress on the Assessment Center Method, and published the first issue of Assessment and Development, a biannual newsletter orientated solely towards innovations in the assessment centre method.

The method has continued to grow from this period to its current global status. It has been estimated that as many as 2 000 companies within the United States, have used this tool. Today, many large corporations employ specialists for conducting in-house assessment centres, while many other organisations make use of the “packaged” programmes offered by consulting firms.

With reference to the use of assessment centres within the South African context, the then South African Railway Services was the first organisation to develop an assessment programme in 1976 (Britz, 1984, p 114). Within a period of six years, this organisation became the leader in the field of assessment methodology by developing several programmes for three different management levels. The purpose of this assessment programme was to identify and develop managerial potential for future use when faced with challenges of a human resource nature.

Over a period, further use and development of this assessment technique as a selection instrument, was derived from different professional groups, such as police officers. Since 1979 other organisations including a press group, a big semi-state organisation and a well-known liquor company,
also made use of assessment centres on a large scale. This resulted in the establishment of the Assessment Centre Study Group, under the auspices of the Institute for Personnel Management, in 1982, focusing on the application and improvement of assessment centre technology in South Africa (Britz, 1984, p 114).

As a special interest group, this study group operates independently, both professionally and financially, from the Institute. However, the Assessment Centre Study Group is committed to the following general objectives:

- To promote the professional use of the assessment centre technique.
- To facilitate the exchange of experience and skills with regard to this technique.
- To stimulate research with reference to the development and application of this technique.
- To ensure that this technique will be applied in an ethical and professional manner by its users.
- To ensure that the application of the technique in South Africa, keeps pace with international development related problem areas.

The question needs to be raised why in effect it took so long for the assessment centre technique to be established in South Africa and to progress to the level already achieved within the United States. Britz (1984, p 115) explained this uncertainty by giving the following reasons:

- Few organisations in South Africa are of sizeable composure to justify an internal assessment programme as such.
- Due to geographical problems, it is difficult for personnel practitioners to be in contact with other colleagues abroad, using similar programmes successfully.
- Practising psychologists are not adequately proficient in this technique.
- Assessment material was not available in Afrikaans, which represented the largest potential market at that stage.
- In the mid 1970’s personnel practices were unsophisticated with an insignificant need for a new method or technique, but this all changed with the industrial development era where the identification and selection of managerial potential became evident.

It seems as if the expected economical revival in the mid 1980’s and thereafter, together with the growing socio-political pressure with respect to better utilisation of designated groups in South Africa, created enormous stimuli towards the assessment centre technique within a variety of applications.

Wood & Payne (1998, pp 152-153) however, claimed that a survey was conducted on 907 organisations employing over 1000 people. It was found that, on average, around 50% of private sector and 39% of public sector organisations used assessment centres, rising to over 60% in some industries, such as food, drink and tobacco, banking, finance and insurance, police and fire. The survey also found that organisations used assessment centres for a range of applications, such as graduate recruitment, external or non-graduate recruitment, internal promotion and career development. The use of assessment centres, therefore, expanded to include those higher up and lower down organisational hierarchies, where those persisted.

More detail on the use of assessment centres will be discussed in sub-point 2.4.
2.4 OBJECTIVES OF THE ASSESSMENT CENTRE

Thornton (1992, p 39) is of the opinion that there are three general principles underlying different uses of the assessment centre. They are the principles of prediction, diagnosis, and training that will first be discussed, followed by specific objectives of the assessment centre. It is important to take note of these theoretical foundations when designing an effective assessment centre.

2.4.1 Principles of prediction

Standardisation, reliability and validity are three key measurement principles.

Standardisation refers to the uniformity of procedures when participants are evaluated (Thornton, 1992, p 40). A procedure is standardised if every person is provided with the same instructions, the same questions, the same rules and time limits, and the same chance to respond fully. Several potential threats to standardisation can occur in the administration of an assessment centre. Situational tests can be unstandardised in the sense that participants may be given different amounts of time to complete a written case study, role players depicting a problem employee may act with different degrees of cooperation, or participants in a group discussion may get quite excited or remain rather calm. The impact of these threats can usually be minimized by careful administration of the programme. Uncontrolled variations should be documented and reported along with assessment results.

Reliability refers to the consistency of scores for two measurements taken on two equivalent samples of behaviour, or for two measurements taken at two points in time (Thornton, 1992, p 40). Reliability also refers to agreement among scores given by different examiners. A test is reliable when a similar score is obtained, no matter which form of the test is used, when it is administered, or who administers or scores it. Unreliability in assessment centre ratings may arise if different topics are
assigned in a leaderless group discussion, if assessors differ in the behaviours they observe and record, or if the assessor team is somewhat negligent in integrating the behavioural information. Fortunately, thorough training of the assessors, the use of clear scoring standards, and the administrator’s faithful adherence to the procedure of sharing and evaluating information in the integration discussion for each participant, control most of these potential sources of unreliability. Research evidence shows that assessment centre ratings are highly consistent.

Validity refers to the ability of the test to achieve its aims and objectives (Thornton, 1992, p 40). Establishing the validity of a test is a complex process that involves the accumulation of evidence that the assessment procedure is measuring the targeted concepts, and will contribute relevant information to the decisions that must be made. In the case of a promotional assessment centre, the most relevant validity information is the accuracy with which assessors could predict long-term success in the jobs in question (Society for Industrial and Organizational Psychology, 1987).

Validity comes when a job has been identified and measured carefully. Validity of the assessment centre can be diminished if it includes components, not critical to the job. It is important to distinguish between signs of effective performance on the job, and behavioural samples. Signs can be thought of as indicators of important behaviours, such as paper-and-pencil tests of mental abilities and personality characteristics, interviews that cover a person’s work experiences, and biographical information forms that cover background and educational experiences.

Behavioural sampling procedures are different and require that the person demonstrate complex behaviours that are similar to on-the-job behaviours. Behavioural sampling is provided by situational exercises being used in an assessment centre. Assessment centres therefore have the potential for high accuracy in predicting future success, because they provide samples of behaviour that show the participants’ ability to handle actual work situations (Thornton, 1992, p 41).
2.4.2 Principles of diagnosis

The theory of diagnosis of differential strengths and weaknesses is similar to the theory of prediction of long-term success, but is based on some additional principles of good measurement (Thornton, 1992, p 41).

Diagnosis requires clear and discrete measurement of separate characteristics (Wiggins, 1973). By contrast, for prediction of long-term success, dimensions are evaluated as a way to ensure representative coverage of important elements in job performance, but the real interest is in predicting overall potential.

For diagnosis, the measurement must give accurate measures of each of the separate dimensions in and of themselves. According to Cascio (1987) the measurement procedure must also give measures of those attributes that are not highly related to each other. For example, if everyone who scored high on leadership also scored high on oral communication, the assessment process would not provide a diagnosis of different skill levels on these two dimensions.

The result from a diagnostic assessment centre is classification (Cascio, 1987; Wiggins, 1973). Classification is the process of matching the profile of an individual's strengths and weaknesses with situation requirements, in order to maximise the effectiveness of the entire system. In a diagnostic assessment centre, a person is placed in the correct types of training activities, so that he/she will improve in job related skills.

To help with classification of managers, an assessment centre must provide accurate assessment of separate dimensions of managerial competence (Thornton, 1992, p 42). For example, it must evaluate decision-making ability independently of other dimensions, such as impact on other people. To accomplish this “non-dependent” evaluation, the assessment centre must be designed with certain features. The dimensions chosen must be conceptually distinct, the exercises must be set up so that assessors can detect variations in an individual’s
performance from one dimension to another, and assessors must be trained to make the appropriate distinctions among behaviours, relevant to specific dimensions.

2.4.3 Principles of training relevant to a developmental assessment centre

If an assessment centre is to be used for training managerial skills, a different set of principles is involved in the design (Thornton, 1992, p 42). Whereas the emphasis in promotion or diagnostic programmes is on evaluation and measurement of behaviour, the emphasis is now on change in behaviour. The exercises should provide opportunities for each participant to develop in areas where he/she is weak.

Principles of learning and development provide guidance in the design of several aspects of the assessment centre, including the selection of dimensions to be developed, the way exercises are conducted, how and when feedback is given, and the general climate of the programme. It is therefore necessary to look at some key principles of training and development.

More recently, two areas of theory and research have contributed to the development of management training programmes, being adult learning and social learning (Thornton, 1992, p 43).

The adult learning theory is built on the premise that adults learn differently from children, because they have a large amount of experience to draw on, are more receptive to learn, and want to acquire skills that will help them to perform important roles in life (Knowles, 1970). In view of these particular characteristics of adults, Knowles (1973) also derived several suggestions on how training programmes should be set up. The training should be organised around reality problems rather than abstract disciplines. Adults need a safe environment in which to discard old modes of behaviour. Adults will then improve their learning skills if they are provided an opportunity to be actively involved in the learning process.
The social learning theory gives different and helpful insights in the compilation of management training programmes. Bandura (1977) has shown that a person learns important behaviours vicariously by watching others learn. When observing the behaviour of others, one can see which actions are effective and reinforced, and which are ineffective and not reinforced. This principle is exemplified in the situational exercises of assessment centres that involve participation with other managers. Bandura (1977) has also shown that people become more self confident in their skills when supportive conditions prevail. This is when there are multiple opportunities to be successful, when the learner can observe other people being successful, when credible people provide support, and when the situation does not produce so much anxiety that the person questions his/her own ability to succeed. These conditions give practical suggestions on how an assessment centre should be set up to foster actual learning and real skill development.

See Appendix A (Table 2.1) for a summary on the different ways that assessment centres have been implemented (Thornton, 1992, p 45).

2.4.4 Specific objectives of the assessment centre

According to the article by Munchus & McArthur (1991, pp 5-9), assessment centre results have been utilised for many purposes in the American industry, with new applications being suggested as this method continues to mature.

The primary use of assessment centres is a predictor of success in a target position for which the individual is being considered. In this application, the relative ranking of personality strengths is compared to the requirement set for the target position. After a historical base has been established by performance appraisals for previously assessed occupants of a position, a correlation between performance and assessment centre results creates feedback, which allows a refinement of criteria for the target positions. This feedback process should allow
increased predictive accuracy when the assessment centre is used as a predictor of performance.

Individual and organisational development can be enhanced by the use of the assessment centre method. Results from this method provide input on which individual characteristics require further development for improved performance at the present position. This individual's need for special training can be made available to the immediate supervisors to provide on-the-job development. Information on consistent weaknesses within a particular department of an organisation, can be useful for management decisions on human resource planning, organisation structure adjustments or possible requirements for in-house training programmes.

In conjunction with the foregoing use for development, assessment programme results can be utilised to judge the effectiveness of development programmes. When used before and after participation in such a programme, the findings can be compared to provide feedback information on its effectiveness. In this application, the assessment centre method need not be extensive, as it only needs to be designed to assess the personality aspects, which were the targets of the development programme.

The above are the main uses of the assessment centre method in the industry at present. Increased attention to productivity and efficiency in the workplace has increased the use of assessment centres as an evaluation tool, to obtain this end.

Thornton (1992, p 8) also adds that during layoffs, an organisation is sometimes faced with difficult decisions about whom to release and whom to retain. An assessment centre is then used to simulate the job requirements of the restructured department. Each employee is given the opportunity to demonstrate his/her capabilities for the new assignment. Participants reported that they believed the assessment centre provided a fair chance to demonstrate relevant skills. They
preferred this process over one in which the decision was based solely on seniority, or on their supervisors’ performance evaluations of their current jobs.

It is important to take note of the wide variety of applications of the assessment centre method. All this should not be interpreted to mean that all assessment centres are alike, or that there is only one way to conduct an assessment centre. Quite the opposite is true. The design of an assessment centre depends on the purpose it will serve, and on the type of climate the organisation wishes to create for current and potential employees to be employed.

However, this relationship between human resource management systems and organisational climate will be discussed in sub-point 2.5.

### 2.5 THE RELATIONSHIP BETWEEN HUMAN RESOURCE MANAGEMENT SYSTEMS AND ORGANISATIONAL CLIMATE

Organisations differ dramatically in the type of human resource management system they use. Some are rigid and mechanistic, others are quite flexible and humanistic (Schein, 1970). Assessment processes are one manifestation of these different orientations to employees in the organisation. They will differ from organisation to organisation, depending on the character of the organisation, the demands of the context, and the image the organisation wishes to project.

Human Resource Management (HRM) specialists have begun to explore the relationship of an organisation’s characteristics to its personnel practices. Jackson, Schuler & Rivero (1989) have shown that organisation characteristics, for example emphasis on innovation, technology and organisation structure, are related to several personnel practices in areas such as performance appraisal, compensation, employment security, and training.
At a more theoretical level, Lawrence (1984) has argued that even though all organisations perform each of the human resource functions listed above, the particular manner in which these functions are performed, varies considerably from one organisation to another. The HRM style of an organisation should be compatible with the more general philosophy of management, which the organisation wishes to perpetuate. Every organisation should be aware that its HRM practices, especially its evaluation procedures, have a strong effect on the attitudes and behaviour of applicants and employees.

According to Schein (1970) applicants and employees form an implicit contract with an organisation as a result of the way they are evaluated in selection, training, and performance appraisal procedures. If they are treated in a routine and mechanical way, employees may put forth only limited efforts, but if they are treated in a caring and individualised way, they are more likely to put forth extra effort on behalf of the organisation.

Applicants to an organisation begin to form impressions of the organisation on the basis of their first experiences with recruitment and selection practices (Rynes, Heneman & Schwab, 1980). Organisational brochures supply information about policies and practices, interviews treat applicants with respect or condescension, tests may appear relevant and fair or irrelevant and invasions of privacy, and contracts in the employment office may be supportive or demeaning.

Thornton (1992, p 9) is of the opinion that all of these interactions with representatives of an organisation form the basis of initial impressions. He added that these perceptions of the organisation’s personnel functions tend to generalise quite widely to other features of the organisation. The applicant begins to form an impression regarding other organisation policies, other members of the organisation, and the general organisational climate. Even more importantly, these initial impressions form the basis of subsequent attitudes towards the organisation and of the employee’s commitment to that organisation (Wanous, 1992). Ultimately, the employee’s effort, job performance, and decision to stay or
leave the organisation, are affected by attitudes that may have been formed during these early contacts.

In order to be effective, an assessment centre must conform to certain requirements. These essential features will be discussed in sub-point 2.6.

2.6 ESSENTIAL FEATURES OF AN ASSESSMENT CENTRE

There are several basic requirements for an assessment process to legitimately be called an “assessment centre” according to the Guidelines and Ethical Considerations for Assessment Center Operations (Task Force, 1989). The Guidelines were written by a task force of experienced practitioners and endorsed by nearly 2000 people at the 1989 International Congress on the Assessment Center Method.

Over the years, proponents of the assessment centre method have insisted that this term should be applied to only certain methods. The reason for this protectiveness is that there is considerable research supporting the consistency and accuracy of the method.

Individuals developing other assessment methods, sometimes wish to benefit from the good publicity given to the assessment centre method, without establishing the same level of empirical support. Proponents of the assessment centre method, therefore, have insisted that the term be reserved for only those procedures that contain the following basic elements (Task Force, 1989):

- A job analysis of relevant behaviours must be conducted to determine the dimensions, competencies, attributes, and job performance indicators important to job success, in order to identify what the assessment centre should evaluate.
- Behaviours displayed by participants must be classified into meaningful and relevant categories such as dimensions, attributes,
characteristics, aptitudes, qualities, skills, abilities, competencies and knowledge.

- Assessment techniques used in the assessment centre must be designed to provide information for evaluating the dimensions previously determined by the job analysis.

- Multiple assessment techniques must be used which can include tests, interviews, questionnaires, socio-metric devices, and simulations.

- Assessment techniques must include a sufficient number of job related simulations to allow opportunities to observe the candidate’s behaviour, related to each competency or dimension being assessed.

- Multiple assessors must be used to observe and evaluate each respondent, by considering characteristics such as diversity of race, gender, age, organisational level, and functional work area.

- Assessor must receive thorough training and demonstrate performance that meets specific guidelines, prior to participating in an assessment centre.

- A systematic procedure must be used by assessors to record specific behavioural observations accurately at the time of observation, which might include techniques such as handwritten notes, behavioural observation scales, or behavioural checklists.

- Assessor must prepare a report of the observations made during each exercise, before the integration discussion or statistical integration.

- The integration of behaviours must be based on a pooling of information from assessors or through a statistical integration process, validated in accordance with professionally accepted standards.

Wood & Payne (1998, pp 161-168) suggested that there are eight stages to consider when designing an assessment centre. They are the following:
- Identify the competencies (research suggests a number of seven competencies) that must be measured, from a job analysis or competency-elicitation study.

- Identify and work within practical constraints as far as time and availability of assessors is concerned.

- Identify exercises and other measures by either buying an off-the-shelf exercise, or customising an off-the-shelf exercise, or by designing own exercises.

- Arrive at a decision rule before the assessment centre runs, on the pattern of results that will indicate a successful candidate.

- Attend to the logistics and provide individual timetables to candidates and assessors.

- Communicate with all the role-players, such as external candidates, internal candidates and other internal stakeholders, in order for them to understand the purpose of the assessment centre, its nature, and what will happen after the centre.

- Train and certify assessors in the interpretation of tests and questionnaires, which will be used in assessment centres.

- Monitor assessment centre results and evaluate the success of the centre.

Byham & Thornton (1986, pp 163-164) is of the opinion that if certain basic principles are applied systematically, it will lead to accurate assessment and prediction of managerial performance. These principles are the following:

- Assessment should be based on clearly defined dimensions of managerial behaviour.

- Multiple assessment techniques should be used.

- A variety of types of job sampling techniques should be used.

- Assessors should know what it takes to succeed, and be thoroughly familiar with the job and the organisation and, if possible, have experience in the job.
- Assessors should be thoroughly trained in assessment centre procedures.
- Behavioural data should be observed, recorded, and communicated amongst the assessor team members.
- Group discussion processes should be used to integrate observations, rate dimensions, and make predictions.
- The assessment process should be partitioned into stages that delay the formation of general impressions, evaluations, overall ratings, or final predictions.
- Respondents should be evaluated against a clearly understood external norm group, and not against each other.
- Prediction of managerial success must be judgemental.

Assessment centre methodology is not appropriate for all performance assessment situations, but evidence indicates that it should be a component of most supervisory or managerial selection or evaluation programmes. The question is not which methodology is best at predicting supervisory and managerial success. The appropriate question is what combination of methodologies produces the best results. The assessment centre method would almost always be on any such list of methods.

It is also important to know which activities do not qualify to be associated with an assessment centre. Those will be listed in sub-point 2.7.

2.7 NON-ASSESSMENT CENTRE ACTIVITIES

According to the Guidelines and Ethical Considerations for Assessment Center Operations (Task Force, 1989), the following kinds of activities do not constitute an assessment centre:

- Assessment procedures that do not require the respondent to demonstrate overt behavioural responses, for example, computerised in-baskets calling for multiple-choice responses.
- Panel interviews or a series of sequential interviews, as the sole technique.
- Reliance on a single technique (regardless of whether it is a simulation) as the sole basis for evaluation, however, a single comprehensive assessment technique that includes distinct job related segments, is not precluded by this restriction.
- Using only a test battery composed of a number of paper-and-pencil measures, regardless of whether judgements are made by a statistical or judgemental pooling of scores.
- A single-assessor evaluation where the measurement is done by one individual, using a variety of techniques such as paper-and-pencil tests, interviews, personality measures, or simulations.
- The use of several simulations with more than one assessor, but with no pooling of data where each assessor prepares a report on performance in an exercise, and the individual, unintegrated reports are used as the final product of the centre.
- A physical location labeled as an “assessment centre”, which does not conform to the methodological requirements noted above.

It is however at this stage, necessary to look at a typical assessment centre, as described by Thornton in sub-point 2.8.

### 2.8 A TYPICAL ASSESSMENT CENTRE

Thornton (1992, pp 2-3) gave a good example of an assessment centre operation that will follow hereafter. It is important to remember that there is no typical or universal way that assessment centres are set up or conducted.

On Monday morning, 12 participants or assessees (for example supervisors being considered for promotion to senior management level), six assessors (for example Human Resource Management staff members and senior managers), and an administrator report to a site away from the organisation, such as a conference centre. Prior to this
time, the assessors have been trained to conduct assessments, and the participants have been briefed about the programme.

At the assessment centre, the administrator provides orientation, makes introductions, and reviews the schedule. Over the next two days, the participants take part in a series of situational exercises and are observed by the assessors. While six participants are engaged in a group problem solving discussion, the other six are individually analysing a case study of an organisational problem and preparing a written report on it. Each participant then conducts a performance review session with a problem employee, makes a presentation of ideas for improving operations, and responds to paperwork that has accumulated in a manager’s in-basket.

Assessors evaluate the exercises and take notes. After each exercise, they write a report, summarising the types of decision-making, as well as interpersonal and communication behaviours, demonstrated by each individual they were assigned to observe. These assignments are rotated so that each participant is observed by at least three assessors.

After two days of these exercises, the participants return to their jobs, and the assessors spend the next two days discussing their observations and making evaluations on management potential. Each participant is discussed at length. Assessors take turns reporting the behaviours they observed, relevant to the performance dimensions. After all the reports are compiled, the assessors individually rate the participant on each performance dimension, using a five-point scale. These independent ratings are posted on a chart, and any differences are discussed until assessors reach agreement. Thereafter, individual ratings of the probability of success as a senior manager are made and discussed until consensus is reached. In many programmes, the assessors then discuss the development needs of the participant and make suggestions on what may be necessary to improve job effectiveness, if any.

After a few days, each participant receives a written report on his/her results. Reports are also given to senior level managers who will be
making promotional decisions. When the assessment centre is used to diagnose training needs, there may be a feedback session with the participant and his/her immediate supervisor to plan follow-up actions.

There are many variations on the basic theme. In particular, very different procedures are useful in integrating behavioural observations. In the example above, assessors discuss their ratings until consensus is reached. Statistical integration of ratings is according to Thornton (1992, p 3) another procedure that is gaining wider acceptance. For example, some organisations compute an average of the individual assessor’s ratings to derive final dimension ratings. Others use a formula to combine final dimension ratings into an overall prediction of success. It is therefore, necessary to look at the advantages and disadvantages of the various data integration methods for decision-making purposes. However, this issue will be discussed later on in this chapter.

A detailed analysis of the five key elements of the assessment centre method, to be taken into account in designing an effective assessment centre, will be addressed in sub-points 2.9 – 2.13. These elements are the following:

- Dimensions to be assessed.
- Situational exercises.
- Observing and classifying behaviour.
- Group discussion of assessment information.
- Providing feedback of assessment centre results.

An important aspect to take cognisance of when designing an assessment centre, is the issue of dimensions that needs to be assessed. This aspect will be discussed in sub-point 2.9 with reference to general principles that must be considered for a specific assessment programme, the importance of job analysis, types of dimensions, and determining the number of dimensions.
2.9 DIMENSIONS TO BE ASSESSED

Thornton (1992, p 51) is of the opinion that the purpose of the assessment centre, should guide the selection of dimensions to be assessed. The human resource manager or assessment administrator designing the assessment centre, should formulate a clear statement of the purpose of the assessment centre, and should specify the ways in which the information will be used. Afterwards, when analysing the target job, only appropriate dimensions should be selected for assessment. It is important that the purpose of the programme and the types of dimensions must be made compatible, so that the observation and judgement tasks of the assessors are guided properly.

2.9.1 General principles

Certain principles must be considered when designing a programme, either for selection and promotion, or for diagnostic or developmental purposes.

For selection and promotional programmes, organisations are usually interested in using an assessment centre to identify candidates who have the potential to learn and grow in a new position (Thornton, 1992, p 52). Attributes related to the individual’s potential to learn, should therefore be assessed, for example, basic interpersonal and problem solving skills. It is also important that the job analysis effort should be designed to identify those attributes that the assessors should be focusing on in the exercises. These attributes must be clarified for all assessors to have a common frame of reference in terms of their observations.

For diagnostic programmes, the assessment centre should measure only “developable” skills (Thornton, 1992, p 53). A developable skill is one that can be improved in a relatively short time with a reasonable amount of effort by the individual and the organisation, for example, problem analysis and decision analysis. The participant must receive constructive feedback from the organisation. Available training programmes must be
introduced in order to improve diagnosed weaknesses, and the participant’s immediate supervisor must be furnished with support to help overcome deficiencies. If the organisation is unwilling or unable to provide follow-up resources to address weaknesses on a given dimension, then that dimension should not be assessed in a diagnostic programme.

Development programmes should be built around a different set of dimensions. Similar to the dimensions in a diagnostic assessment centre, these dimensions should be developable, but more specifically, they should be trainable in the context of the current assessment centre (Thornton, 1992, p 53). It would be senseless to ask facilitators to try to observe and give feedback on, for example, customer service orientation, if the exercises had no content that provides an opportunity for behaviours in that dimension. It is also helpful if the dimensions are qualities that can be observed by the participant’s supervisor, colleagues, and subordinates, since it is common practice to ask these people to provide descriptions of on-the-job-behaviour prior to the participant’s attendance at the assessment centre. Feedback from these other sources can then be combined with feedback from the assessment exercises. In addition, the dimensions should be clearly related to the functioning of a group or the organisation as a whole. In the context of a team-building programme, for instance, it would serve little purpose to assess and give feedback on the individual’s written communication skills.

2.9.2 Job analysis

A thorough analysis of the target job or jobs, provides valuable information regarding the development of an assessment centre during several stages, and ensures a good understanding of the job requirements (Thornton, 1992, pp 54-55). A job analysis provides the following information:
- A list of the dimensions to be assessed.
- Examples of behaviours that clarify dimensions with reference to assessor training.
- Suggestions as to the types of exercises that resemble job situations.
- Suggestions for the content of problems to be put into the exercises.
- An indication of the level of proficiency required on the dimensions.
- Standards for scoring the performance of the participants in the exercises.
- Documentation of job-relatedness of the assessment process, for use in the event of a lawsuit.

Although many different job analysis methods can contribute valuable information, usually no single method will suffice. Valuable information can be obtained from reading an in-house job description, consulting trade journals, observing incumbents actually performing the job, interviewing incumbents and their subordinates and supervisors, and, in some cases, interviewing people who are served by the incumbents (O’Hare & Love, 1987).

The survey of Gaugler et al. (1990) showed that the vast majority of assessment centre developers, used several of these job analysis techniques with great success.

2.9.3 Types of dimensions

The term “dimension” has been used in the literature on assessment centres, referring to a cluster of behaviours that are specific, observable, and verifiable, and that can be reliably and logically classified together (Thornton & Byham, 1982, p 117). Even though a dimension may appear to be very similar to a task or trait, dimensions are quite different. In contrast to a task, which states what is accomplished on the job, a
dimension is defined in terms of specific behaviours the person carries out, to accomplish the task.

However, Thornton (1992, p 58) is also of the opinion that a good definition of a dimension includes a statement of the behaviours that make up the dimension, the conditions under which the behaviours are demonstrated, and the level of effectiveness on the dimension expected of someone in the target job. Examination of dimensions that has been used in the past, shows that this term usually refers to some form of human attribute.

According to Thornton (1992, p 58), human attributes can be arranged along a continuum, as illustrated in Figure 2.2. This will be followed by a detailed explanation of the different elements.

**Figure 2.2: A Continuum of Human Attributes**

<table>
<thead>
<tr>
<th>Current Skills</th>
<th>Potentialities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present knowledge</td>
<td>Abilities</td>
</tr>
<tr>
<td>Well-developed skills</td>
<td>Competencies</td>
</tr>
<tr>
<td>Clear preferences</td>
<td>Aptitudes</td>
</tr>
<tr>
<td>Opinions</td>
<td>Traits</td>
</tr>
<tr>
<td></td>
<td>Values</td>
</tr>
</tbody>
</table>

*Source: Thornton (1992, p 58).*

### 2.9.3.1 Potentialities

On the right-hand side of the chart, are basic human attributes that are deeply ingrained in an individual (Thornton, 1992, p 58). Two examples are intelligence and shyness. Attributes of this nature are characterised by stability, consistency and generality. These attributes are stable in the sense that they have taken a long time to develop in adult individuals, and will likely take a long time to change. There is considerable consistency in the behaviour of people in these types of human attributes. Attributes on the right end of the continuum are also widely pervasive in their effect on many different tasks or human endeavors. An individual’s
level of intelligence allows him/her to solve a variety of different complex and abstract problems. However, generality does not mean that the trait affects all other related activities. An individual, whose intelligence level is high, may not be very good in solving abstract mathematical problems.

Examples of basic human attributes commonly assessed in promotional assessment centres, include decision-making ability, impact on others, and motivation to work. Each of these attributes meets the criteria for potentialities and will affect a wide variety of managerial functions. An individual with a high level of decision-making ability, who has a positive effect on others, and is highly motivated, will probably have a high potential for success in a variety of managerial and professional positions (Thornton, 1992, p 59).

2.9.3.2 Skills

At the left end of the continuum, lies a set of human attributes that are specific and developed as a result of recent educational, work, or life experiences, and subject to change more quickly than potentialities (Thornton, 1992, p 59). These attributes are specific in that they refer to a limited area of knowledge or a circumscribed skill, for example, knowledge of how to calculate a rate of return on an investment, would be a technique learned in a course on financial analysis, or within a bank environment.

In the assessment centre context, examples of dimensions that fall on the left-hand side of the continuum, include knowledge of agency regulations, financial analysis skills, and orientation to company values. These attributes would be relevant to a specific job in a specific organisation (Thornton, 1992, p 60).

2.9.3.3 Other attributes

In the middle of the continuum lies a set of dimensions that vary between the two extremes (Thornton, 1992, p 60). These dimensions vary in terms of the major characteristics defining the continuum, and that is
specificity and stability, and are being referred to as abilities, competencies or general skills. These dimensions are attributes relevant to performance in a well-defined area of work, and although they are learned, they are relatively stable over time.

In the assessment centre context, examples of dimensions that fall somewhere in the middle of the continuum, include planning and organising, management control, and sensitivity. These dimensions can be made more explicit in several different ways. One way might highlight the more generalised characteristic, while a second might highlight the specific skill (Thornton, 1992, p 60).

It is instructive to note that a significant number of assessment centres, use dimensions falling all along the continuum represented in Figure 2.2. on page 2-37. Table 2.2 in Appendix B, shows the percentage of assessment centres assessing various types of dimensions, as revealed in the survey of Gaugler et al. (1990) of over 200 organisations. Unfortunately, the survey results do not reveal the specific types of dimensions, which are used in the various programmes.

2.9.4 Determining the number of dimensions

According to Thornton (1992, p 62), recent research has shown that assessors may not be able to adequately distinguish among a large number of dimensions. With large numbers of indistinguishable dimensions, assessors often give ratings that are interdependent and not meaningfully different from each other. The research also shows that assessors can seldom make meaningful distinctions among more than five to seven dimensions.

However, Thornton (1992, pp 62-63) is of the opinion that future assessment centres should not attempt to assess more than seven dimensions, unless the designers are willing to go to great lengths to assess a larger set of dimensions by including many exercises, giving extensive assessor training, and spending a long time in the integration discussion.
After determining the dimensions to be assessed, the next step or key element in designing an assessment centre, is to evaluate the effectiveness of situational exercises, determine the number of exercises, and integrate other assessment devices with situational exercises. These aspects will be discussed in sub-point 2.10.

## 2.10 SITUATIONAL EXERCISES

### 2.10.1 Types of situational exercises

An essential element of any assessment centre is the observation of behaviour in situational exercises. Situational exercises are performance tests that present participants with complex stimuli and call for complex responses (Thornton, 1992, p 67). For example, the complex stimuli may include a set of letters and memos in a manager’s in-basket, and the corresponding complex responses may be written responses, assignments, and directions to subordinates or other people.

Each situational exercise is a test, simulating an important aspect of the job for which the participant is being considered or trained (Thornton, 1992, p 68). Each situation affords assessors the opportunity to observe and evaluate the participant on a number of predetermined dimensions, such as written and oral communication, problem analysis, leadership and initiative.

Several types of situational exercises that have been used frequently in assessment centres for different purposes will now be discussed, including advantages and disadvantages to keep in mind. They are the following:

- Interview simulations.
- Fact-finding.
- Written case analysis.
- Oral presentation.
- Leaderless group discussion.
2.10.1.1 Interview simulations

Thornton (1992, p 69) defines an interview simulation as a situational exercise in which the participant talks one-on-one with someone playing the role of a subordinate, colleague, or customer. For example, as a first-line supervisor, the interviewee can be the subordinate, discussing a performance-related problem.

The interviewee is a role player, trained to act in a standardised manner. The role player might ask questions, make suggestions, answer questions, and even act upset, depending on what the situation calls for. The participant must converse with the role player and resolve the problem, while being observed by an assessor. The interview simulation is particularly effective in revealing behaviours on dimensions such as oral communication, empathy and tact, and problem solving ability with people (Thornton, 1992, p 70).

The advantage of this exercise is that it is relatively short, and several different interview simulations can be incorporated in an assessment programme. Interview simulations are particularly appropriate for assessment centres designed to train inexperienced supervisors, because they provide controlled situations for assessing and learning rudimentary communication and problem solving skills (Thornton & Cleveland, 1990).

One disadvantage of the interview simulation is the need for a role player, which increases staffing needs. A solution is to have the assessor play the role of the interviewee, but this in turn causes another problem for the assessor, who must then perform two difficult functions simultaneously. Another potential problem of one-on-one exercises is that the interviewee may not play his/her role consistently from one participant to the next.
This problem can be controlled through proper training of role players and careful monitoring by assessors (Thornton, 1992, p 71).

2.10.1.2 Fact-finding

In this exercise, the participant reads a small amount of information about a problem, and then is given the opportunity to acquire additional information by directing questions to a resource person (Thornton, 1992, p 71). The resource person can be a trained role player or an assessor. Vague questions result in general answers, while specific questions yield valuable information. After the question-and-answer period, the participant is asked to make a recommendation and provide a rationale. The resource person may then challenge the participant, supplying new information in an attempt to elicit a change of position. For example, as a senior manager, a situation is simulated where a budget proposal has been turned down.

The fact-finding exercise is particularly effective for assessing and training skills, involved in soliciting information from customers, peers, and other sources that might not be willing or able to provide complete information. Assessors can also use fact-finding exercises to evaluate decision-making skills and stress tolerance (Thornton, 1992, p 71).

One disadvantage of fact-finding exercises is that they are somewhat difficult to construct and administer (Thornton, 1992, p 71). In order to be challenging, the resource material must be very thorough, and the assessor must anticipate many questions from assertive participants. For this reason, the resource person or assessor must be familiar with the material in order to provide responses in a timely fashion. The resource person might also have difficulty providing a standardised situation to all participants.

2.10.1.3 Written case analysis

In a case analysis, the participant is given material to read that describes an organisational problem, and is then asked to prepare a set of
recommendations for senior management. The problem may require financial, system, or process analysis (Thornton, 1992, p 71). For example, each participant must review record keeping procedures in a community blood bank.

One advantage of this exercise is that it is quite flexible and can be tailor-made to assess general attributes, such as the ability to organise an operation, or specific skills, such as calculating a rate of return on investment. The results of this exercise can be a written report or an oral presentation. When a written report is submitted, assessors can evaluate both its form and substance. Poorly written work may suggest the need for remedial training in business correspondence. Superficial or faulty analysis of the case material or unsystematic evaluation of alternative solutions may be indications of the need for training in decision-making skills (Thornton, 1992, p 72).

A difficulty in using written exercises is in developing objective scoring guidelines for the assessors (Thornton, 1992, p 72). However, when multiple assessors use objective standards to evaluate written work, high levels of consistency and accuracy are attained.

2.10.1.4 Oral presentation

In an oral presentation exercise, participants are asked to make a short speech about a simple topic, or a more formal presentation about a case study like those described above in sub-point 2.10.1.3. The presentation is usually given to an assessor, who in turn asks questions, intended to challenge the participant. Where it is relevant to the target job, the assessor may even put the participant under stress by opposing his/her conclusion and pointing out its limitations and flaws. In another format, several participants give their presentations, then discuss their recommendations and choose the best solution (Thornton, 1992, p 73).

A presentation exercise is a relatively easy exercise to construct and administer. Participants can be requested to converse on virtually any topic. Administrators can have a list of topics and use this exercise to fill
time when other exercises move ahead of schedule. This exercise also provides an excellent opportunity to assess a particular facet of oral communication skills, which is the ability to make formal or semi-formal presentations (Thornton, 1992, p 73). In some assessment centres, the participants are provided materials such as flip charts, marker pens, and transparencies to use with an overhead projector. Assessors can then see how participants use these devices to enhance the effectiveness of their communication skills.

2.10.1.5 Leaderless group discussion

In this exercise, four to eight participants are given several problems to resolve in a fixed period of time. They are asked to discuss the problems and to prepare written recommendations that have been endorsed by all the participants (Thornton, 1992, p 73). For example, the problems may involve a set of recommendations on how to handle personnel issues that have surfaced in the organisation. In one form of the group discussion exercise, there are no roles assigned, and everyone cooperates in developing the best solution for the organisation as a whole. In contrast, a more competitive situation can be simulated in which each participant is assigned the role of a head of a department or special interest group, trying to get a share of a federal grant or other source revenue.

The leaderless group discussion is particularly effective for assessing group leadership skills, such as the ability to contribute good ideas and guide the discussion process (Harris, 1949). Problem analysis and decision analysis abilities can also be assessed (Bass, 1950, 1954).

However, this situational exercise has several limitations when being used in an assessment centre. The climate and tone of the discussion can differ from one group to another, ranging from quite lively and challenging to quiet and subdued, depending on the composition and mood of the group. This potential lack of standardisation across groups, means that assessors sometimes have a difficult time knowing whether the behaviour they observe in a particular individual, is a function of the
individual or the group dynamic. Another point of debate is whether this exercise is a valid simulation of job situations, because few organisational settings are truly “leaderless”. In most situations, there is a designated supervisor, task leader, or project coordinator who has some formal leadership assignment (Thornton, 1992, p 74).

2.10.1.6 Assigned-leader group task

In this exercise, the administrator of the programme assigns one participant to act as the leader of the group, and then gives the group some tasks to accomplish (Thornton, 1992, p 74). For first-line management positions, the individual may be assigned to head a team of assistants, and build a piece of equipment using Lego blocks.

The obvious advantage of this type of exercise is that it simulates the job of many managers, where he/she leads a group of subordinates. The group task provides an opportunity to assess a variety of leadership skills. However, its disadvantage is that it is time-consuming to give all participants a chance to act as the assigned leader. To be fair, the assessment centre would have to have one such exercise for each participant. Some programmes overcome this problem by changing the leadership assignment part way through the exercise (Thornton, 1992, p 75).

2.10.1.7 In-basket

An in-basket is a simulation of the paperwork that arrives in the mailbox of the typical manager. It might include memos, letters, reports, announcements, requests, and irrelevant information that present personnel, financial, accounting, or procedural problems for the manager. The participant is given a calendar, background information, general instructions, and paper and pencils for response, but usually no access to a secretary or telephone. The participant must write out instructions, draft letters, make decisions, and set up meetings, all within a relatively
short time span. The time limit forces the participant to set priorities and make decisions (Thornton, 1992, p 75).

The written responses to the in-basket materials can be scored separately to reveal various dimensions of administrative skills. There is also a follow-up interview in which the participant explains to an assessor the reasons for action taken. Whereas the written material provides recorded evidence of how the action will be seen by others, the verbal explanations provide valuable insight into the participant’s thought processes (Thornton, 1992, p 75).

The in-basket exercise allows the assessment of a wide variety of dimensions and has a high degree of face validity for many managerial jobs. This explains why the vast majority of assessment centres use an in-basket (Gaugler et al, 1990). Dimensions such as delegation, planning and organising, management control, and judgement can be assessed with an in-basket.

Many studies have been conducted to investigate the relationship of performance on in-basket exercises and success in management (Thornton & Byham, 1982; Schippmann, Prien & Katz, 1990). The evidence reveals that in-basket scores are related to ratings of actual managerial performance, progress in management levels, and on-the-job performance of tasks similar to those assessed in the in-basket. Both Thornton & Byham (1982) and Schippmann et al (1990) concluded that the research evidence supports the use of in-baskets for making promotional decisions. However, Schippmann et al (1990) warned that in-basket content varies considerably and therefore, research evidence is quite fragmented.

One limitation of the in-basket exercise is time. It usually requires two to three hours to complete and then almost that much time to score. Additional time is required for a follow-up interview and evaluation of interview performance. Scoring can be difficult, because the assessor
must consider the complex set of responses given to several items, as well as the person’s rationale for these responses (Thornton, 1992, p 76). Developing clearer scoring standards for assessors will minimise such problems. Scoring can be standardised by providing assessors with examples of behavioural responses to each item and by showing the relevance of the behaviour to a specific dimension. With adequate training, assessors appear to be able to rate in-basket performance with high levels of consistency (Thornton & Byham, 1982; Schippmann et al., 1990).

### 2.10.1.8 Business games

Business games come in various levels of complexity. For example, a two-hour simulation of a manufacturing operation run by a team of six department heads, or an eight-hour computer-driven game for 20 managers running a large multi-divisional organisation. As a complex game unfolds, it often resembles a sequence of situational exercises, for example, a leaderless group discussion takes place, a number of one-on-one interactions occur, someone makes a presentation, others engage in fact-finding, and the group convenes again to make decisions (Thornton, 1992, p 77).

The interactive nature of business games provides opportunities to assess dimensions such as strategic planning, teamwork and leadership. The content of the game can be geared to the assessment of financial analysis, marketing, or production control skills (Thornton, 1992, p 77).

The complexity of business games, even the simple ones, creates advantages and disadvantages. On the positive side, games come closer to representing “real life” in the organisation (Thornton, 1992, p 78). Games look more realistic to participants than less complex simulations, and they can help experienced managers to acquire more skills. Games can also be exciting and fun for the participants.

On the negative side, behaviour of participants is often hard to observe as they move around to different rooms and huddle in small groups.
When used for training purposes, the situation may be so complex that no one has the skills to function all that well and, consequently, little learning may take place (Thornton & Cleveland, 1990).

After discussing the various types of situational exercises in sub-point 2.10.1 that could form part of an assessment programme, an integrated assessment approach as far as simulation exercises are concerned, will be discussed in sub-point 2.10.2.

### 2.10.2 Integrated exercises

Thornton (1992, p 78) claimed that two or more of the above-mentioned exercises, could be related to one another. This can be done in several ways. For example, one set of instructions about the company, its industry, and the environment in which it operates, can be used for all exercises. The results of one exercise can also be used as the input for another, where the recommendations that a candidate generates in the written report for a case study, can be used as the starting point for a group discussion.

When Gaugler et al (1990) surveyed over 200 assessment centres, they found that 20% used an integrated exercise, typically composed of four definable segments. Integrated exercises have also been used quite successfully at different job levels. Adams & Thornton (1987) developed a set of three exercises to select instructors of pilots. Slivinski, Grant, Bourgeois & Pederson (1977) developed an integrated set of exercises for first-line management in the Canadian Public Service Commission. Spangenberg, Esterhuyse, Visser, Briedenhann & Calitz (1989) used a set of exercises for middle level managers in a South African organisation.

Thornton (1992, p 79) is of the opinion that integrated exercises have high face validity. It implies that they closely resemble the actual job and the actual organisation. This feature implies that employees may be more willing to participate in the assessment centre, and have more confidence in the results and feedback.
However, there are arguments against integrated exercises in management assessment centres.

One argument is that the manager’s job is very fragmented and made up of short, disjointed interactions (Mintzberg, 1975). The relevant background information, the people involved, and the skills required are very different from one task to the next. A set of disconnected and unrelated assessment exercises therefore, resembles a very important part of the manager’s life.

A second argument against integrated exercises has to do with motivation. When exercises are discrete and activities are unrelated, participants are given a “fresh start” in each exercise. A lack of understanding of the information in one exercise will not penalise the individual in the next exercise.

Related to the second argument, is the idea that separate exercises give independent measurements of dimensions being assessed. This is important, because according to measurement principles, an evaluation is more consistent and accurate, if it is based on several different observations that are not artificially related to each other (Nunnally, 1978). However, integrated exercises may lead to some “contamination” of performance, from one exercise to the next.

Another aspect that needs to be clarified is the number of exercises in the assessment centre.

### 2.10.3 Determining the number of exercises

Assessment centres that use a larger number of exercises and a wider variety of exercises, tend to show more accuracy (Gaugler & Thornton, 1989). A recent survey of over 200 assessment centres showed that the typical assessment centre used approximately five exercises, but some centres used 10 or 11 exercises (Gaugler et al., 1990). It is reasonable
to conclude that a variety of exercises are needed, but little is gained from having more than two of the same type.

Research has not been conducted to investigate the compilation of types and numbers of exercises that is optimal, but theoretical support for the use of multiple types of exercises, comes from the correspondent inference theory (Jones & Davis, 1965). This theory states that people’s behaviour can be explained by searching for stable qualities in them that are discernible across different situations. When an individual behaves the same way in several different situations, the behaviour is a function of stable attributes of the individual, and not of the external situation. This implies that several shorter exercises of different types should be used, rather than a few exercises of the same type. Multiple exercises will then give assessors a chance to make these interpretations about dimensions and predict future managerial success.

Other assessment devices for example, paper-and-pencil tests and interviews, can also be integrated with situational exercises. However, assessment centre results can then either be processed in a parallel or serial manner. These two procedures will be discussed in the next sub-point.

**2.10.4 Integrating other assessment devices with situational exercises**

In addition to situational exercises, other measurement techniques can be used to evaluate individuals in an assessment centre (Thornton, 1992, p 89). The most frequently used instruments are aptitude tests, questionnaires measuring personality characteristics, biographical information forms, background interviews, and interviews in which the participant is asked to describe how he/she would handle certain job situations. Occasionally, projective tests of personality, current affairs tests, or measures of reading ability are also used.

When tests and interviews are used within the framework of the assessment centre, either of two procedures can be followed where
these other methods can be used in parallel with, or in series with the situational tests (Thornton, 1992, p 89).

In the parallel processing method, tests and interviews are used in the same way as situational exercises, to provide information that the assessors consider simultaneously when formulating their overall dimension ratings (Thornton, 1992, p 89). This process is depicted in Figure 2.3. below. In this approach, the assessors learn about behaviour in exercises and information from the tests and interviews, and then give an evaluation on the dimensions. The rationale is that the score on an aptitude test, along with observed reasoning behaviours in situational exercises, is relevant to the evaluation of dimensions such as problem solving and decision analysis. Assessors can gain a better understanding of success or failure in these dimensions, if they have information about a participant’s general reasoning ability as indicated by paper-and-pencil tests. A similar argument can be made for personality tests.

Figure 2.3: Parallel Processing of Assessment Centre Results


Thornton (1992, p 90) is of the opinion that another way to use tests in an assessment centre, is to put them in series with the situational exercises, as depicted in Figure 2.4 on page 2-52. The assessors first evaluate all the information from the situational tests and derive dimension ratings. The test scores and interview information are then introduced, and the assessors integrate all this information to arrive at an overall assessment rating.
There are advantages and disadvantages associated with each of these procedures.

An advantage of parallel processing is that all information is used to formulate ratings on dimensions, and comparisons and contrasts can be made between the results of different types of measurement. A disadvantage of parallel processing is that managers may rely too heavily on test scores, which can be deceptively “objective” in comparison with the sometimes conflicting reports of several assessors, evaluating several exercises (Thornton, 1992, p 91).

An advantage of serial processing is that the major sources of information are kept separately in the early stages of assessment. The “here-and-now” behaviours of situational exercises are integrated, before the information about “past” behaviour from the interview and “test” behaviour, is examined. The disadvantage of serial processing is that it takes two separate integration meetings. One meeting is with the observers of situational exercises and the other with people who review all available data. If someone else integrates the final set of information, the assessors may feel loss of control. However, assessors can perform both steps (Thornton, 1992, p 91).

Thornton (1992, p 91) emphasised the fact that assessors do not have access to test or interview data in either of these methods, before they observe behaviours in the situational exercises. There is just too much potential for other information to influence behavioural observations.
The next element of the assessment centre method is to evaluate behaviours in order to assess managerial competence.

In sub-point 2.11, steps that individual assessors usually take to observe, classify, and evaluate behaviour in separate exercises, will be discussed.

However, in sub-point 2.12, steps that a group of assessors will take to share their evaluations, determine final dimension ratings, and derive overall assessment ratings, will be discussed.

2.11 OBSERVING AND CLASSIFYING BEHAVIOUR

After deciding on the types of dimensions that are appropriate for the assessment centre and the types of exercises that elicit behaviours relevant to those dimensions, it is important to focus on the process of evaluating behaviours to assess managerial competence. Steps that individual assessors take in this process, will now be attended to.

2.11.1 Introduction to two theories of social judgement

In order to understand the steps performed in the assessment centre method, it is necessary to explain two contrasting theories of social judgement, as described by Thornton (1992, pp 96-98).

Social judgement by definition refers to the process of perceiving and evaluating the behaviour of others and forming impressions about their strengths and weaknesses (Thornton, 1992, p 96).

One point of view describes social judgement as an objective process in which many specific pieces of factual information are accumulated, whereafter this information is integrated in a logical and systematic way to form accurate judgements about people. This approach is referred to as the “behaviour-driven” theory (Thornton, 1992, p 96). It implies that the evaluator is capable of attending to detailed behaviour of other people, storing memories of specific events, and forming objective judgements based on what actually takes place.
The second point of view states that observation of behaviour is influenced by subjective biases. Only certain information is selectively stored and used, and the observer has limited and flawed capabilities to remember prior events and to make accurate interpersonal judgements. This approach is referred to as the “schema-driven” theory (Thornton, 1992, p 96). It implies that what the evaluator thinks about other people’s behaviour, is influenced by prior perceptions, memory, and inferences about these people. The evaluator fails to objectively see much detailed behaviour that take place, and his/her memory consists largely of general impressions and broad evaluations of people.

See Appendix C (Table 2.3) for a summary on the differences between the behaviour-driven theory and the schema-driven theory (Thornton, 1992, p 97).

However, there are similarities between these two theories. For example, behaviour-driven theories allow some loss of memory detail over time, and schema-driven theories recognise that the evaluator stores specific information along with general impressions of other people (Thornton, 1992, p 97).

Ebbesen (1981) is of the opinion that the assessment centre method is based on a mixed theory about perception and memory of social observations. In this mixed theory, both specific instances of events and general categories of events are recorded in memory. In line with a behaviour-driven approach, the assessment centre method is based on the assumption that assessors can systematically observe and use behavioural information generated by the exercises. In fact, many of the techniques and procedures used in an assessment centre, are designed to help assessors make and remember detailed observations. In line with a schema-driven approach, assessors are taught to use meaningful dimensions of managerial performance or prior beliefs, in order to help focus their attention during complex exercises, and to make systematic judgements about the level of skill demonstrated. In addition, procedures are designed to minimise the negative influences of prior impressions.
and, at the same time, to benefit from the positive influences that meaningful dimension categories can provide.

2.11.2 Steps in the behaviour reporting method

The traditional assessment centre method has its origin in the method devised by AT&T (Bray & Grant, 1966) and adopted widely through the years. This method is called the “behaviour reporting method”, because the emphasis is on recording and sharing behaviours, observed in each situational exercise.

The traditional assessment centre method involves the following steps (Thornton, 1992, p 98):

- Observation and recording of behaviour.
- Classification of behaviour into managerial attributes.
- Presentation of exercise reports by one assessor to others.
- Preliminary ratings of overall dimension performance.
- Discussion of preliminary ratings to achieve consensus.
- Preliminary overall assessment ratings (optional).
- Discussion of overall assessment ratings to achieve consensus (optional).

The first four steps will be discussed hereafter, whilst the last three steps will be attended to in sub-point 2.12.

2.11.2.1 Observation and recording of behaviour

Assessors record behaviours while participants engage in group discussions, interview simulations, or other exercises. Assessors usually use a blank form to record details of their observations. Usually the assessor has only one chance to observe behaviour, as it unfolds in the exercise (Thornton, 1992, p 98).

In the case of written exercises, such as the in-basket or a case study analysis, there is a permanent record of overt behaviours of the participant, which can be scrutinised for evidence of dimension-related
behaviours (Thornton, 1992, pp 99-100). The assessor can then easily re-examine the written work to confirm what action was taken. However, there is no substantiated difference in the reliability of assessments of written exercises and overt behaviour.

Few studies have directly examined the observation process of assessors. Gaugler and Thornton (1989), who investigated the accuracy of assessors’ observations of videotaped exercises, conducted a very thorough study. It was found that assessors observed a smaller percentage of the behaviours when asked to look for nine, as opposed to six or three dimensions. This research suggests that although assessors can and do make many good observations, they do not record all the dimension-relevant behaviours that participants exhibit. The assessors in this study were trained for a limited amount of time. The assumption can be made that experienced assessors would observe a larger percentage of behavioural events. The results also show that the assessors have trouble making behavioural observations when asked to observe larger numbers of dimensions.

2.11.2.2 Classification of behaviour

While the assessors are observing behaviours, they may actually start the classification process by making notes that signify the dimension in which a particular behaviour belongs. This thorough process takes place directly after the exercises are completed. Assessors refer to their notes and identify, for example, all the oral communication behaviours they have observed. They then record these behaviours on a separate form to facilitate reporting to the other assessors in the integration discussion, which takes place after all the exercises have been completed (Thornton, 1992, p 104).

The classification process of assessors is a neglected area of research. Gaugler and Thornton’s (1989) study is the only research that has been performed to date. It was found that assessors were able to correctly classify far more behaviours when they had to deal with three
dimensions, compared to dealing with six to nine dimensions. The relatively weak classification accuracy scores found in this study, suggest that these subjects were not making “clean” distinctions among the dimensions, but they improved when they had a smaller number of clearly defined dimensions. Well-trained and experienced assessors may also be more effective at this task.

2.11.2.3 Presentation of reports

At the end of this process of observation and classification, assessors have detailed narrative reports of behaviours, classified into appropriate dimensions (Thornton, 1992, p 108). The assessor completes each of these reports, soon after he/she views the candidates participating in the exercises.

When the assessors meet to integrate their observations, they discuss the performance of one participant at a time. Each assessor reads the narrative report of behaviours observed relative to the various dimensions. In their reports, assessors consider several points relevant to each dimension, for example, did the participant set a follow-up date to review performance improvements discussed in a performance appraisal simulation? While the reports are being read, the other assessors listen and make notes of each dimension on a separate form. This dimension summary form provides accumulate behavioural evidence, relevant to a dimension across all exercises (Thornton, 1992, p 108).

2.11.2.4 Preliminary ratings of overall dimension performance

When all the exercise reports have been read, each assessor takes a few minutes to review the accumulated behavioural evidence, and determines a preliminary overall dimension rating for each of the dimensions (Thornton, 1992, p 111). These preliminary ratings are made independently and written on the dimension summary form. The ratings are then posted on a large flip chart or white board.
In past assessment centre studies, the level of agreement amongst assessors on preliminary overall dimension ratings, has been found to range from relatively low (0.50), to moderate (0.67), to quite high (0.94). Thomson (1970) found high levels of agreement for both psychologist assessors and management assessors.

After the preliminary overall dimension ratings are posted, the assessors discuss any discrepancies in ratings and come to an agreement on the final overall dimension ratings.

2.11.2.5 Integration procedures

The integration process is one of arriving at a consensus and involves more than just averaging the preliminary ratings. When there is agreement from the beginning, the final rating is usually that particular score. On the other hand, a minority opinion may prevail in the discussion as the behavioural evidence is reviewed more carefully (Thornton, 1992, p 115).

After agreement has been reached on the dimension ratings, each assessor may give a preliminary overall assessment rating (Thornton 1992, p 115). An overall rating is appropriate if the purpose of the programme is to make a recommendation for hiring or promotion.

However, if the purpose of the programme is diagnosis of training needs or development of managerial skills, there is no need for an overall rating. In this instance, the most important outcome of the assessment is information regarding the dimensions themselves. Assuming that an overall assessment rating is appropriate, each assessor independently reviews the final dimension ratings and uses his/her best judgement to combine all the information. These preliminary overall assessment ratings are then posted on a flip chart and discussed until consensus is reached on a final overall assessment rating.
A more complete analysis of the group processes of the assessor discussion, which include the last three steps of the assessment centre method, will be attended to in sub-point 2.12.

At this stage, it is necessary to also look at alternative methods of recording and integrating observations, as this will complete the process of observing and classifying of behaviour.

2.11.3 Alternative methods of recording and integrating observations

According to Thornton (1992, p 118), research evidence on assessments has raised certain questions about the accuracy of the assessment centre method, which may be improved with new procedures. The most influential push for change has been pressure to streamline the assessment centre method. An assessment centre takes a great deal of the participant's time and even more of the assessors' time. In view of the high cost of running an assessment centre, compared to the cost of a simple test or background interview, it is altogether reasonable that assessment centre designers would try to cut down on time and expenses. It appears that whatever method is used, will have important effects on how assessors observe behaviour, interact with each other, and rate performance.

The following alternative methods will be discussed:

- Within-exercise dimension rating method.
- Assessor reliability.
- Relationship between within-exercise dimension ratings and other measures.
- Construct validity.

2.11.3.1 Within-exercise dimension rating method

The traditional observation and classification process, as been described above, is called the behaviour reporting method. A major variation on this method is the “within-exercise dimension rating method”, which
conveys the way many assessment centres operate (Thornton, 1992, p 118). In the within-exercise dimension rating method, assessors are asked to provide a rating on each dimension that can be observed in an exercise. After assessors have observed and classified behaviours, they normally use a five-point rating scale to evaluate the participant’s performance on each of the appropriate dimensions. These ratings may, however, affect individual judgements and the group dynamics in the assessor discussion.

### 2.11.3.2 Assessor reliability

Three studies have examined assessor agreement for within-exercise dimension ratings. Borman (1982) reported estimates of assessor reliability that ranged from 0.44 to 0.92 with an average of 0.76. Kehoe, Weinberg & Lawrence (1985) found that assessors differentiated amongst participants’ skills with a high degree of consistency, where reliability ranged from 0.66 to 0.94. Finally, Konz (1988) reported an assessor reliability of 0.75 for the dimension ratings made in one exercise. Although there is some variability in these figures, the results suggest that different assessors rate a given dimension within an exercise, with an acceptable level of agreement.

### 2.11.3.3 Relationship between within-exercise dimension ratings and other measures

Russell (1987) studied the relationship of within-exercise dimension ratings from an in-basket and an interview simulation with self-ratings of interpersonal behaviours, which were seen as important to effective managers. He found that self-ratings were not related to the dimension ratings from the in-basket, but were related to several of the dimension ratings from the interview simulation. The conclusion was made that assessors’ ratings do not reflect underlying personal characteristics, but instead reflect the degree to which candidates’ behaviour is congruent with managerial role expectations, within a given exercise. The results might also suggest that people see themselves more accurately in some situations than in others.
Three studies examined the relationship of within-exercise dimension ratings and across-exercise dimension ratings.

Hinrichs & Haanpera (1976) found that the ratings from an in-basket and a written job report were only slightly related to overall dimension ratings, but ratings from the group discussion exercise were more strongly related. This means that the assessors were putting more weight on the group discussion than the other exercises when forming their overall dimension ratings, possibly because they saw that this exercise was most job-relevant.

Neidig, Martin & Yates (1978) found that all of their exercises contributed to those dimensions that had to be measured, with the in-basket contributing the most unique and the background interview the least unique information.

Kehoe et al (1985) found that ratings from the last exercise candidates participated in, contributed substantially more to the across-exercise dimension ratings, than the first two exercises. However, because exercise order was not varied, it is not known whether this finding was due to a recency effect or real differences in the exercises.

2.11.3.4 Construct validity

Construct validation is a complex process of forming hypotheses about an assessment procedure and then examining empirical evidence to support or refute those hypotheses (Thornton, 1992, p 120). Construct validity is established by examining a wide variety of evidence about the internal structure of an assessment procedure, and discovering how that procedure relates to other tests and measures of effectiveness.

One type of construct validity evidence is the relationship among various parts of the assessment procedure. It gives some insight into what an assessment centre measures by looking at the relationships of the ratings on several dimensions within several exercises (Thornton, 1992, p 120).
There are two statistical procedures that have been performed on within-exercise dimension ratings. They are factor analysis (Gorsuch, 1983) and convergent or discriminant validity analysis (Campbell & Fiske, 1959).

According to Thornton (1992, p 121), factor analysis is a statistical procedure that examines the correlations of a large set of variables with each other. If a group of variables tends to correlate with each other, they form a “cluster” or “factor”. Discovery of these factors within a test can explain the composition of that test. When applied to assessment centre ratings, factor analysis has been used to examine the correlations among within-exercise dimension ratings, across all the exercises to identify groups of ratings that “go together”. Two types of factors or clusters might exist. Dimension factors consist of the ratings on a given dimension across all exercises, whereas exercise factors consist of the ratings on all the dimensions within a given exercise. An example of a dimension factor would be ratings of leadership in the group discussion, in the one-on-one exercise, and in the business game. An example of an exercise factor would be leadership, decision-making, and sensitivity within the group discussion.

Using data from three organisations, Sackett & Dreher (1982) found that within-exercise dimension ratings fell into exercise factors, and not dimension factors. Borman (1982) found that many within-exercise dimension ratings were highly related, suggesting that assessors were making global judgements of candidates’ performances.

Another kind of construct validity evidence is the pattern of relationships among within-exercise dimension ratings (Thornton, 1992, p 121). Evidence for convergent validity is present when there are high correlations between the ratings for the same dimension observed in two or more different exercises, for example, problem solving in the interview simulation and problem solving in the case study. Discriminant validity is present when there is relatively low correlations among all the dimensions within each single exercise, for example, problem solving,
sensitivity, and leadership within the group discussion, as well as very low correlations between ratings on one dimension in the first exercise and another dimension in a second exercise, for example, leadership in the group discussion and sensitivity in the interview simulation.

Table 2.4 in Appendix D shows the results of a representative sample of studies with reference to convergent and discriminant validity (Thornton, 1992, p 123).

2.12 GROUP DISCUSSION OF ASSESSMENT INFORMATION

The next step in the assessment centre process involves group decision-making. These steps that a group of assessors will take to share their evaluations, determine final dimension ratings, and derive overall assessment ratings, will now be discussed. Thereafter, alternative methods of data integration will be attended to, as well as advantages and disadvantages of the process of group decision-making.

2.12.1 Final overall dimension ratings

According to Thornton (1992, p 136), assessors share their preliminary overall dimension ratings by posting them on a flip chart, and discussing them in order to resolve differences. There are several possible patterns of ratings that might be generated. When there is total agreement, for example all three assessors give a “4”, then the integration is straightforward and the participant gets a “4”. On the other hand, if there are differences among the ratings, discussion takes place.

Some research on the group judgement process shows that disagreement at this stage, can be beneficial and can lead to increased levels of accuracy in the final group decision (Libby, Trotman & Zimmer, 1987). Disagreement may also reflect a diversity of valid opinions that leads to better decisions in groups (Wanous & Youtz, 1986).
The traditional assessment centre method calls for group consensus. In this context, consensus means that each assessor can accept the rating as an adequate representation of the performance. Consensus does not mean that there is total agreement by each assessor that the rating is exact (Thornton, 1992, p 136).

2.12.2 Overall assessment rating

After the assessors have agreed on the final overall dimension ratings, they may derive an overall assessment rating for each participant (Thornton, 1992, p 136). An overall assessment rating is appropriate if the purpose of the assessment centre is to provide a recommendation for selection or promotion. In this case, decision-makers in the organisation want a clear indication of the final conclusion of the assessment, which is a prediction of success or failure in the new job. An overall assessment rating is usually not warranted in assessment centres used for diagnosis of training needs, or those used for training and organisational development. In such programmes, the end products are dimension ratings or feedback on areas for improvement.

To arrive at an overall assessment rating as in the case of selection or promotion, each assessor evaluates the final dimension ratings and makes an individual judgement on whether the participant is likely to be successful in the target job. This overall assessment rating is a combination of all information presented to this point. The assessor must use his/her judgement on how to combine the dimension ratings. No formal equation is used for weighting the various dimensions. However, job analysis information shows the relative importance of dimensions being assessed. It is expected that each assessor will consider the job requirements and the accuracy of the information regarding the participant, and will combine the dimension ratings based on that knowledge, and on training received in the assessment centre process (Thornton, 1992, pp 136-137).
The overall assessment rating can take several forms. For a selection programme, the rating might be “probability of success”. For a promotional programme, the rating might be “probability of success in the next level” or “probability of success in middle management” (Thornton, 1992, p 137).

According to Bray & Grant (1966), the group of assessors made two predictions in the Management Progress Study launched 25 years ago. It was “probability of promotion” and “whether the person should be promoted”. The first was a prediction of whether the person had the necessary promotional qualities the organisation was currently in search of, whereas the second was an evaluation of whether the person had the qualities that should be recognised and rewarded in the organisation.

After the assessors independently give their overall assessment rating, the ratings are posted on a flip chart and compared. If there is total agreement, then that rating is final. If there is disagreement, the assessors discuss their differences and come to a consensus, much the way they do in deriving overall dimension ratings. There is seldom a need for extensive discussion at this stage. In the majority of cases, disagreement is minimal, and is this last action seen as the closure in the assessment process (Thornton, 1992, p 137).

It is also necessary to look at alternative methods of data integration, as this will create a better understanding when assessment data needs to be integrated.

2.12.3 Alternative methods of data integration

Thornton (1992, p 138) is of the opinion that there are two ways to integrate quantitative data such as assessment ratings, being judgemental and statistical. Judgemental methods involve a subjective process in which people combine information according to their evaluation of the emphasis that should be given to each piece of information. The process of arriving at a consensus during the integration discussion, is an example of the judgemental method of
decision-making. Statistical methods involve the use of a mathematical formula to “add up” information. In such a formula, the relative importance of dimension ratings is specified ahead of time. For example:

\[
\text{Overall Assessment Rating} = (4 \times \text{Decision Making}) + (2 \times \text{Leadership}) + \text{Sensitivity} + \text{Business Orientation}
\]

In this example, decision-making is four times as important, and leadership is twice as important as sensitivity and business orientation. These “weights” are determined by statistical methods, such as multiple regression. More detail surrounding this issue will be discussed in Chapter 8 *(Statistical Analysis).*

The following alternative methods will now be discussed:

- Deriving final dimension ratings statistically.
- Deriving overall assessment ratings statistically.
- Combining final overall dimension ratings.
- Combining preliminary overall ratings.

**2.12.3.1 Deriving final dimension ratings statistically**

To date, no assessment centre research study has investigated the best procedure for deriving final dimension ratings statistically. No study has compared the traditional, judgemental method of reaching consensus on final dimension ratings to a statistical method. The simplest approach would be to average the preliminary dimension ratings, with each rating carrying equal weight *(Thornton, 1992, p 139).*

**2.12.3.2 Deriving overall assessment ratings statistically**

The statistical method of data integration could be useful at two points in the assessment centre process: firstly, in combining final overall dimension ratings into the overall assessment rating, and secondly, in
combining preliminary overall assessment ratings into the overall assessment rating (Thornton, 1992, p 139).

2.12.3.3 Combining final overall dimension ratings

Arguments for statistically derived overall assessment ratings are based on the assumption that individuals can take only a very limited number of factors into account at any one time (Thornton, 1992, pp 139-140). Assessors therefore, are not able to consider and integrate simultaneously a large number of dimensions in reaching an overall rating. With the statistical method, assessors’ duties would end after they have reached consensus on final dimension ratings. Proponents of the judgemental method of integrating assessment data argue that it is difficult to empirically derive the appropriate weights for a statistical combination of information. They add that assessors prefer the judgemental approach and that unique insight into the candidate’s strengths and weaknesses, can be gained through the integration discussion (Thornton & Byham, 1982).

According to Thornton (1992, p 141), another way to combine dimensions statistically to form an overall rating, is to weigh them all equally. This means that the scores are simply added into a combined score. Arguments in favour of equal weighting are that it is a consistent process and prevents assessors from inappropriately emphasising one piece of information. However, new pieces of information may be relevant in certain situations, and there may be a place for special considerations in the judgemental process that are not accommodated in the statistical process.

The process of equal weighting is known as “unit weighting”, because all the dimensions are given a weight of one. Feltham (1988) has shown in one study that unit weights produce an overall rating that is more accurate in predicting success than an overall consensus rating, but there was no confirmation of the prediction in a second independent sample.
2.12.3.4 Combining preliminary overall ratings

Some studies that have compared preliminary and final overall assessment ratings, suggest that the integration process add very little to this stage of assessment. Sackett & Wilson (1982) found that for a group of 719 participants, assessors' preliminary overall assessment ratings disagreed with the final ratings for only 1% of the participants. In addition, the final assessment ratings could be accurately predicted by a simple rule, based on final dimension ratings. Wingrove, Jones & Herriot (1985) also found that final assessment ratings were no more predictive of training performance than preliminary assessment ratings.

One conclusion from these studies is that the integration discussion is unnecessary, because assessors' final ratings typically do not differ from their preliminary ratings, and in fact, can be predicted from their dimension ratings (Thornton, 1992, p 143). A further conclusion is that these studies even suggest that the integration discussion may be harmful, since group dynamics may have a negative effect on discussions and since predictive accuracy as a result of these discussions, have not been shown. However, before such conclusions are warranted and the traditional assessment centre method is modified in practice, far more research is needed.

The process of group decision-making from a pessimistic and optimistic point of view, will now be attended to.

2.12.4 The process of group decision-making

Research literature on group decision-making reveals two contrasting views. One view, which is more pessimistic, is of the opinion that the group discussion process interferes with good decision-making and results in “process losses” (Steiner, 1972). The other optimistic view holds that groups have the potential for “process gains” (Steiner, 1972), and to generate good ideas and provide better solutions (Hill, 1982).

However, both views will now be discussed.
2.12.4.1 Disadvantages of group decision-making

One disadvantage of group decision-making is the fact that the final decision of the group may not be better than the decision of the best individual in the group (Einhorn, Hogarth & Klempner, 1977). Similarly, the group discussion process may dilute good information contributed by the most accurate person. The process of conformity may also operate in such a manner that a more passive member of the group, one who could make a valuable contribution, simply follows the suggestions of the other group members.

Another dynamic that may distort group decisions, is the group polarisation process (Lamm & Myers, 1978). Group polarisation means that the initial position of the majority of the group, is strengthened, following the group discussion action. Members may move toward the dominant position in the group for any number of reasons. One form of group polarisation is the “sky shift” phenomenon (Kogan & Wallach, 1967), in which the final group position is more risky than the initial position of some individual members. For example, it has been found that under certain conditions, the group will endorse a stronger statement of opinion on an issue after the discussion process. One interpretation of this dynamic is that there has been a diffusion of responsibility to all members of the group, in comparison with the responsibility that might fall on any one individual (Latané & Darley, 1970). This interpretation makes sense when there is some negative effect of the group’s decision on another person (Lamm & Myers, 1978), a situation that often exists in assessment centres when the results will be used in promotion or hiring decisions.

According to Janis (1982), “groupthink” is another potentially dangerous process that may undermine the quality of group discussions. Cohesive groups may inhibit differences of opinion and promote conformity to informal, unspoken norms of agreeableness. Members in a cohesive group may strive for unanimity at the expense of appraising alternative actions and positions. However, certain ground rules can combat
groupthink. When assessors are taught to be critical thinkers and to challenge the ratings of other assessors, everyone is assigned the role of devil’s advocate and asked to challenge ratings. Assessors are then given a chance to review all data and change their minds as the integration discussion unfolds. In addition, assessor groups are usually not stable groups that work together over time. Negative dynamics of a cohesive group may therefore, not operate in assessor integration discussions.

2.12.4.2 Advantages of group decision-making

The other viewpoint of group decision-making emphasises evidence that groups can work effectively together, and produce decisions quite superior to those of any one individual (Hill, 1982).

Moscovici (1985) observed that the historical emphasis on conformity in groups has been replaced with recognition that the individual influences the group. Nisbett & Ross (1980) also found that the benefits that come from individuals working in groups, are the best hope for overcoming many deficiencies, inherent in individual human judgement.

McGrath & Kravitz (1982) concluded that groups tend to follow the pattern of “truth supported wins”. This means that even though there may be some group losses, in which the group decision is less effective than that of the best individual, if the good solution has support, the group will accept it. Laughlin & Ellis (1986) have shown that the “truth supported wins” pattern is an accurate description of how groups operate when solving inductive reasoning problems. In addition, many of the arguments that groups do not adequately process information, are based on one of two reasons: either the group is not motivated properly, or they have limited information-processing capabilities (McGrath & Kravitz, 1982). Neither of these two conditions seems to be present in the assessment centre context. Assessors are typically handpicked for their interpersonal skills and interest in human resource issues. They are also trained in and certified to have the required assessment skills.
Thornton (1992, p 147) is of the opinion that benefits come from group decision-making when several individuals with heterogeneous skills and experience, contributes to the decision. Assessors must bring unique information to bear on the evaluation of participants. An assessor team is usually composed of managers with different organisational experience, and each has the opportunity to observe different exercises. For these reasons, it is not surprising when there is a lack of agreement on dimension ratings across exercises. The advantage of this arrangement is that individuals can then pool their expertise to provide a wider variety of information. In this case, the assessors provide “checks and balances” that prevent misinformation or poor judgement by any one individual.

Sniezek & Henry (1990) have proposed and tested a decision-making procedure, which parallels the one followed in the integration discussion of the assessment centre. Group judgements were found to be superior to numerically average judgements of individuals, when compared to judgements of experts. Furthermore, in the group process, the change in the group’s judgement and the judgements of most of the individuals, was in the direction of more accurate judgement.

Miner (1984) conducted research, clarifying that the process used by the group in deriving the decision, determines whether the group produces quality decisions. He found that if the individual group members make independent decisions before the group discussion, the group decision is better than when the decision is made without initial individual judgements. This finding implies that at any stage of the integration session, assessors should report behaviours, perform independent ratings, and then proceed with discussions. Miner also found that after the experiment, he could identify a “best individual” who outperformed the group, but the group itself could not identify the best individual at any better than chance rates. The process Miner found most effective in this research is exactly the procedure used in the assessment centre method, where each assessor makes preliminary independent ratings, and then the group makes the final overall assessment rating.
Thornton (1992, pp 149-153) described specific factors that make a difference, in whether group processes improve or undermine the quality of decision-making. These factors will now be discussed.

2.12.4.3 Factors affecting group effectiveness

When group members have a high level of knowledge and skills relevant to the task at hand, they are more effective than if these skills are absent (Chaiken & Stangor, 1987). Desired levels of knowledge and skill can be assured by selecting competent group members and by training them properly. These conditions are standard practice in the development of an assessment centre.

For a group to be effective, its members must be motivated to perform necessary judgement and decision-making. Ideally, the effort of the group must be at a high level and well co-ordinated. Barker, Wahlers, Cegala & Kibler (1983) concluded that when a group is asked to achieve a high level of performance in terms of sound judgement and fast responses, it performs better than it would under less pressing conditions. Hackman & Morris (1978a,b) suggested that the effort of group members, could be improved by redesigning the group task to include the following features:

- Utilisation of a variety of skills.
- Opportunity to accomplish a specific task.
- Work on a significant task.
- Autonomy.
- Feedback on group effectiveness.

Tetlock (1983, 1985) has argued that individuals will engage in complex decision strategies, rather than simplified thinking, when there is a norm of structured, balanced debate within a group. If the social context makes the decision-maker accountable to others whose positions are not known ahead of time, then individuals will use more thorough and vigilant information processing. According to Tetlock (1983, 1985), complex decision-making requires willingness to be inconsistent in thinking ability,
to engage in self-criticism, and to have more insight into decision strategies.

Groups work most effectively when they utilise existing strategies that each individual has learned previously (Hackman & Morris, 1978a,b). Any one of a number of decision-making strategies may work in a given situation. It is important that group norms supporting the use of a strategy, must be maintained or the strategy must be abandoned. The task of maintaining a proper strategy in assessment centre discussions, usually falls to the administrator leading the discussions. One challenge that organisations face is the maintenance of quality and integrity of the assessment centre process, when it is performed in different departments and divisions (Schmitt, Schneider & Cohen, 1990). Maintaining the “operational validity” of an assessment centre, includes careful scrutiny to ensure that decision-making strategies are being applied consistently (Byham & Temlock, 1972). Assessment centre administrators need to make it a practice to observe a sample of assessor discussions, to see if proper integration procedures are being followed.

According to Hoffman (1978a,b), there are many group dynamic related factors that can inhibit effective problem solving in groups, such as pressures towards uniformity, pressures towards conformity, and an informal structure that has no leader. Most assessor teams are temporary groups who meet only for the duration of a particular assessment centre. There is little concern that ill feelings created in the discussion, will have no adverse effect on the job. Furthermore, the assessor discussion process actually promotes effective group problem solving. All ideas are laid out for consideration and are being evaluated. Conflict is exploited and the group uses differences of opinion to have a better understanding of the participant.

Theories of persuasion give a good understanding of the conditions under which groups process information. Petty & Caccioppo (1986) are of the opinion that groups process information under two conditions: either systematically (very carefully and thorough) or peripherally (very
quickly by using simple rules). Systematic processing will take place if people are motivated and able to engage in careful thinking about the relevance of the message to the problem at hand. Several factors motivate and enable individuals to engage in systematic thinking. These factors are the following:

- Relevance of the material.
- Repeated exposure to the message.
- Adequate prior knowledge about the topic.
- Prior learning of ways to organise material.
- Concern for truth seeking.

This implies seeking a goal towards a correct solution versus one that is accepted by others (Chaiken & Stangor, 1987). These conditions are present in the assessor discussion. Furthermore, when using the systematic style of thinking, people are less likely to be influenced by another individual’s status or appearance. The sex and status of assessors do not determine influence in the integration discussion.

The last major element of a complete assessment centre process or programme is feedback of the results to participants and organisational decision-makers. This aspect will be attended to in sub-point 2.13, as well as looking at the rights of the individual and the responsibilities of the organisation.

### 2.13 PROVIDING FEEDBACK OF ASSESSMENT CENTRE RESULTS

The assessment centre process of making behavioural observations, evaluating performance on dimensions of professional effectiveness, and predicting future success yields a vast amount of information about each individual. These observations and evaluations are made with a high degree of consistency and accuracy (Thornton, 1992, p 165).
However, whether the information has any practical value for the individual and the organisation, depends on how it is used. The value of the information is dependent on whether or not:

- Feedback is given in a timely fashion to the appropriate people.
- A creditable person delivers reports sensitively.
- Clear examples of both positive and negative results are included in the reports (Thornton, 1992, p 165).

Organisations have many options when it comes to handling assessment information (Thornton, 1992, p 166). The human resource manager must make certain decisions that will have far-ranging implications on the process of supplying feedback. How such decisions are made, depends on the purpose of the assessment centre, as well as on ethical and professional considerations. The goals in planning a feedback procedure, are to devise an effective system for both retaining and disseminating information, and to achieve the original purpose of the assessment centre. At the same time, the rights of the individual must be carefully protected.

### 2.13.1 Matching feedback to assessment purpose

Promotion or selection programmes, diagnostic programmes, and training programmes all require different procedures for providing feedback to management and participants (Thornton, 1992, p 166).

The purpose of a promotion or selection programme is to help the organisation, identifying individuals who have potential for long-term success in the organisation. Feedback should be given to individuals, who are making selection and promotional decisions. Assessment information should not be given to other individuals, who are providing independent evaluations of candidates for promotion. However, each participant should be informed of the results of the evaluation.

The objective in a diagnostic programme is to devise an individualised training programme for each participant. Feedback should be given to
the participant and to the participant’s immediate supervisor, in order for them to set up training activities together.

The purpose of a management training or team-building assessment centre is to foster skill development during the assessment centre itself. Feedback must therefore, be given after each exercise for the participant to learn new skills, and practice them in subsequent exercises during the programme. Results of these kinds of programmes are not typically supplied to the participants’ immediate managers.

It is necessary to know what the rights of the individual are, as well as the responsibilities of the organisation.

2.13.2 Rights of the individual and responsibilities of the organisation

Each organisation must compile a set of policies and procedures that strike a delicate balance between transparency and confidentiality. On the one hand, participants have a right to know the results of assessment and to benefit from participation in the programme. On the other hand, the organisation must protect itself against unethical use of the information and the threat of a lawsuit (Thornton, 1992, pp 166-167).

2.13.2.1 Employee rights

The individual has the right to know the results of any evaluation that will affect his/her status in the organisation. More specifically, if assessment centre information is going to be used in making decisions about promotions, in evaluating performance, or in designing training plans, then the individual has the right to know the content of the assessment report (Task Force, 1989). It makes good sense to let the individual know how he/she performed. The credibility of the system depends on individuals having confidence in its accuracy and fairness.

Shuler (in press) has pointed out that any evaluation must have social validity and be acceptable to the participants. Social validity is based on the opportunity of the participants to receive information on how the
programme was conducted, and the results achieved in the evaluation. Perceptions about selection practices are especially important, because applicants and employees generalise from these specific practices with reference to a wide variety of organisational characteristics (Thornton, in press).

Furthermore, giving individuals clear feedback about their evaluations, fits in with a commitment type of human resource programme (Lawrence, 1984). In a commitment relationship, the individual and the organisation have an open and equal relationship with each other. The organisation treats the individual as a mature and responsible individual, recognising his/her rights as an equal partner in the employment relationship.

Ethical and professional guidelines for industrial and organisational psychologists also require that assessment centre participants receive feedback regarding their evaluations. The Guidelines and Ethical Considerations for Assessment Center Operations (Task Force, 1989) states that there should be some provision for feedback of the results of an assessment centre. Participants already employed by an organisation, should be allowed to read any written reports and recommendations. External applicants for employment should be informed about the final recommendation, if they request that information.

2.13.2.2 Organisational interests

The organisation has many interests to protect when it devises a system to gather, retain and disseminate information about employees.

Firstly, the organisation must ensure that standardised procedures are being followed (American Educational Research Association et al, 1985), in order for the system to have operational validity (Byham & Temlock, 1972). Operational validity means that a selection procedure is being implemented in a consistent and fair manner across various divisions and departments, where it is being used.
Secondly, organisations must maintain control over the results of an assessment centre to protect the organisation in the event of a lawsuit, or investigation by an equal employment opportunity agency. Against the background of the litigious nature of society, especially in the employment arena, organisations must have written policies about personnel decision-making, and take steps to ensure that these policies are being implemented throughout the organisation (Thornton, 1992, p 168).

Finally, the organisation must ensure that the information is used properly (Thornton, 1992, p 168). Assessment centres are very expensive operations that involve valuable time of management assessors. If the program is to benefit the organisation and demonstrate its own usefulness for the expense involved, the results must be applied properly.

2.13.2.3 Other considerations

The type of feedback given to current participants in an assessment centre, can influence the effectiveness of future assessments (Thornton, 1992, p 169). For example, although it makes sense to give detailed feedback to participants in each specific exercise, a written report of this nature could easily be passed along to someone about to participate in the next assessment programme. The advantage to the “informed” participant could alter the subsequent assessment. There is no clear resolution for this conflict situation. The organisation must weigh the benefits and drawbacks of each practice.

The human resource manager must also have clear policies regarding feedback and information retention, because practices in these areas, determine whether the organisation can conduct meaningful research and evaluation studies on the assessment centre. It might seem that detailed information from the assessment centre should be disseminated widely throughout the organisation. The problem with this practice is that managers may base their subsequent performance appraisals on assessment centre ratings, rather than performance within the specific
job. If the performance appraisals are contaminated with the assessment ratings, it is impossible to evaluate the true accuracy of the assessment centre. Organisations must therefore, have clear policies about what information is given to participants, where the reports are kept, who has access to reports, and how long the reports are retained (Thornton, 1992, p 169).

A few responses to feedback from an assessment centre will be discussed in the next sub-point.

**2.13.3 Response to feedback**

Numerous surveys have been conducted of participants’ reactions to feedback from an assessment centre (Thornton & Byham, 1982, p 338). A large majority of participants respond favourably, confirming that the feedback interview is helpful in understanding their own strengths and weaknesses. They find the feedback provider supportive and willing to give clear examples of the reasons for the assessment results. However, feedback is handled very differently in different organisations and may be handled inconsistently by different staff members. It is therefore, difficult to generalise about all feedback sessions.

However, there are some common ingredients that make feedback more acceptable to participants. For example, participants like to learn about specific examples of behaviours in more than one exercise that support the evaluation results. In addition, they want the feedback to focus on evaluations that represent consensus amongst assessors, rather than on the idiosyncratic reaction of only one assessor. These characteristics of feedback have been found to be effective in a wide variety of organisational settings (Taylor, Fisher & Ilgen, 1984).

**2.14 SUMMARY**

In the last five sub-points (2.9 – 2.13) of this chapter, a detailed view of each of the five key elements of the assessment centre method had been given. Dimensions were chosen and exercises designed to elicit
behaviour relevant to those dimensions. Theory was explained on how individual assessors observe, classify, and evaluate behaviour and how the assessor team forms consistent and accurate dimension ratings and final overall assessment ratings. Finally, feedback was given to senior management for organisational decision-making purposes, and participants and their supervisors used the feedback to develop managerial and professional skills. This brings to conclusion the discussion regarding theoretical perspectives on the assessment centre method.

A broader look will now be taken in Chapter 3 at the assessment centre method itself, where the question “What do assessment centres really measure?” be addressed.

Chapter 3 will focus on various responses to assessment centres and empirical research evidence on assessment centre validity. An explanation will be given on why assessment centres work, as well as the reasons why assessment centres fail. Certain conditions for success and the utility of assessment centres will then be discussed, followed by a comparison between the assessment centre and other selection instruments.
CHAPTER 3

RESPONSES TO ASSESSMENT CENTRES
3.1 INTRODUCTION

Assessment centres have made many valuable contributions to the selection and development of personnel over the past 40 years. Empirical research evidence provides substantial support with reference to the predictive accuracy of assessments of managerial competence, and long-term potential for management success, as described briefly in Chapter 2.

While there is much evidence to support the assessment centre method, serious questions have also been raised, concerning what the method really measures and whether it warrants the expense. Critics often cite evidence, which brings into question three key points (Thornton, 1992, p 211). These key points are the following:

- The ability of assessors to make judgements on separate dimensions of managerial effectiveness.
- The need for the integration discussion amongst assessors.
- The effectiveness of the assessment centre method in comparison with other assessment methods, such as tests and interviews.

In order to address the above-mentioned disputes, the following sub-points will be discussed in this chapter:

- Status of assessment centres.
- Validity of assessment centres.
- Why do assessment centres work?
- Why do assessment centres fail?
- Conducting successful assessment centres.
- Utility of assessment centres.
- Comparison between assessment centres and other assessment procedures.

A brief overview will now be taken at the present status of the assessment centre method, followed by details on the validity thereof.
3.2 STATUS OF ASSESSMENT CENTRES

One way of understanding the status of assessment centres, is to examine how various groups evaluate the method (Thornton, 1992, p 212). Reactions of participants, assessors, unions, and the courts will be discussed.

3.2.1 Response by participants

Numerous surveys (for example, Thornton & Byham, 1982; Teel & DuBois, 1983; Fleenor, 1988) of participants, who have been exposed to an assessment centre, show that they respond quite favourably to the procedure. Typical findings are the following:

- Participants believe the exercises measure relevant managerial qualities and provide a fair chance to exhibit job-related skills.
- Participants perceive the exercises as difficult and challenging, but even though they feel stressed throughout the programme, they see the pressure as realistic and reasonable.
- The majority reported their understanding of the feedback and believe it to be useful for development.
- The overall endorsement of the assessment process is high and most participants would recommend it to a colleague.

3.2.2 Response by assessors

Similar survey research with managers, who have served as assessors, has shown that they have equal positive reactions (Thornton, 1992, p 212). Some of these reactions are as follows:

- Managers find the assessor training helpful as a means of learning about managerial performance dimensions, as well as sharpening their observation and evaluation skills.
- Managers apply the skills they learn as assessors to their job duties.
- Serving as an assessor is time-consuming and stressful, but they believe the experience is worth the effort.
One potential problem with long-standing assessment centre programmes, is that assessors can get “stale” after serving on several programmes over a period of many months (Jeanneret, 1989). In such situations, human resource staff members must guard against any unwarranted modifications of standard assessment centre procedures, for example, not taking adequate notes or failing to thoroughly discuss differences in ratings to reach consensus. The accuracy of an assessment centre can be undermined, if the programme is implemented in an inconsistent way.

3.2.3 Response from unions

Selection and promotion decisions have traditionally been a prerogative of management, and have fallen outside the field of negotiations with labour unions (Thornton, 1992, p 213).

More recently, organisations have seen the value of involving unions in a wider variety of decision-making activities with reference to certain management functions. The Team Columbus Project (1990) provides an exciting example of a joint union-management effort to design and implement an assessment centre, for the purpose of selecting team players and team leaders in a new manufacturing organisation. The union representatives reported that the collaborative efforts in the assessment centre resulted in better understanding between the parties, feelings of trust rather than antagonism, development of skills, and pride of ownership in the new organisation. In addition, the team experienced a reduction in turnover rates, less absenteeism and no grievances after the assessment centre programme was implemented. Not all of these improvements can be linked to the assessment centre. Other concurrent changes in the organisation also contributed to these outcomes.

3.2.4 Response from the courts

The assessment centre method has been part of personnel selection procedures, which have been challenged in court cases alleging unfair discrimination.
While the issues have varied somewhat from one situation to another, the common complaints by plaintiffs have been that the assessment centres were not job-relevant, were administered in an inconsistent manner, and were biased against racial minorities (Thornton, 1992, pp 213-214).

Thornton & Byham (1982, pp 381-387) reported that the assessment centre had successfully weathered these challenges in court. There was no instance where the court ruled against the assessment centre method. The successful defense was due to the following elements:

- Extensive research evidence behind the assessment centre method.
- Detailed job analysis that had been conducted.
- Empirical evidence that the method provided consistent and accurate evaluations.
- Evidence that the method is fair to minorities and women.
- Tight controls to ensure administrative consistency.

These cases show that the courts have been supportive of the assessment centre method when it is carried out carefully, as prescribed by the Guidelines and Ethical Considerations for Assessment Center Operations (Task Force, 1989). In addition, the cases provide support for the belief that the assessment centre method can survive the scrutiny of the courts, where plaintiffs' expert witnesses challenge many aspects of the selection procedure. In no case, has a court ruled against an organisation using an assessment centre.

According to the article by Munchus & McArthur (1991, p 9), one of the primary court decisions bearing on the growth of the assessment centre method, was the Supreme Court decision in Griggs versus Duke Power in 1971. In Chief Justice Warren Berger’s statement of the court’s opinion, he said, “… the touchstone of compliance is job-relatedness”. The requirement for job-relatedness sets a new criterion for judging selection procedures to comply with the Equal Employment Opportunity Commission (EEOC) of the United States. This criterion invalidated
previously used psychological tests as non-job-related, and cause many companies to start searching for a valid job-related evaluation tool.

The “job-relatedness” term used by Justice Berger is identical in meaning with “content validity”. Content validity is a way of measuring an evaluation tool’s validity and is defined as the degree to which the job content is reflected in the content of the evaluation tool. The assessment centre method has been accepted as a valid evaluation tool, based on content validity owing to the use of job simulation exercises. This validity has been further supported by studies reflecting a negative correlation between the candidate’s race or sex and the assessment centre results (Munchus & McArthur, 1991, p 9).

Court rulings since 1971, have shown an increased trend for requiring tailored simulations, reflecting as closely as possible the actual job requirements (Munchus & McArthur, 1991, p 9). This trend shows acceptance by the courts of the evaluation tool, while urging high validity, based on the content validity premise.

Details on various empirical research studies will now be attended to, including evidence on the content validity of the assessment centre.

3.3 VALIDITY OF ASSESSMENT CENTRES

It is necessary to pay attention to the validity issue of the assessment centre method, in order to answer the question of whether or not assessment centres are a valuable human resource management technique.

Validity is a general concept covering evidence that an assessment or development procedure is capable of achieving its stated purpose (Thornton, 1992, p 186). Because any given assessment technique can be used for a variety of purposes, many different types of evidence must be examined in order to reach a conclusion on whether or not the assessment centre process is of value. One correlation statistic or one research study can not determine this.
By providing evidence on the following assessment concepts, many studies need to be examined (Thornton, 1992, pp 186-187):

- Relationships between assessment data and many types of criteria, including on-the-job performance.
- Relationships between assessment data and other measures.
- Changes in assessment centre scores over time.
- Differences in assessments of men and women, of different racial groups, and of different age groups.
- Patterns of components of assessment ratings.

All this evidence must then be interpreted to provide support for or refutation of the claims made about the characteristics, measured by the assessment procedure (Landy, 1986). Even though there are many different types of evidence that can be examined, validity boils down to an interpretation of all this accumulated evidence (Binning & Barrett, 1989).

It is very difficult to make general statements about the validity of assessment centres, based on surveys that differ so vastly in terms of criterion data and size. During the past 15 years, psychologists have developed a new methodology that can be applied to investigations into validity (Van der Maesen de Sombreff & de Veer, 1997, p 146). This methodology is known as “meta-analysis” and can be used to combine results from various studies. However, meta-analysis is not 100% reliable, because it involves subjective decisions in the classification of various studies.

Gaugler, Rosenthal, Thornton and Bentson carried out the largest meta-analysis of assessment centres in 1987 (Van der Maesen de Sombreff & de Veer, 1997, p 146). This research looked at 50 assessment centre validity surveys, which reported on 107 validities. These surveys were based on 12 000 people who were assessed in an assessment centre. Most of the surveys date from between 1975 and 1985.
Cronbach & Meehl (1955) is of the opinion that the wide variety of evidence on the assessment centre method, can be classified into three categories:

- Evidence of content representativeness (content validity).
- Evidence of relationships with criterion measures (criteria validity or predictive validity).
- Evidence of the relationship of the assessment centre method and other measures of related constructs (construct validity).

Evidence of content validity, predictive validity and construct validity will be discussed in sub-points 3.3.1 – 3.3.3 respectively.

3.3.1 Evidence of content validity

Information about content validity consists of evidence concerning testing activities (Thornton, 1992, p 187). Two requirements must be considered:

- Does the test material reflect a representative sample of situations that employees face on the job?
- Are the required responses to the test material a representative sample of performance requirements on the job?

Content validity evidence typically consists of judgements by experts that both these requirements have been met. The testing procedure need not cover the entire job, but it must cover important and critical job duties (Society of Industrial and Organizational Psychology, 1987).

Judgements about the similarity of exercises to job situations, are the most common type of evidence used to demonstrate the validity of assessment centres in individual organisations (Gaugler et al, 1990). Organisations typically defend an assessment centre by pointing out the following features:
- Dimensions are chosen on the basis of job analysis.
- Exercises include important and frequently encountered job activities.
- Behaviour in the exercises can be classified into critical performance dimensions.
- Trained assessors can make consistent and accurate observations on participant behaviour.

Sackett (1987) claimed that when using content validity evidence to validate an assessment centre, other features in addition to the points listed above, must also be taken into consideration, which can affect assessment centre ratings. These features are the following:

- Instructions given to participants.
- Scoring systems used by the assessors.
- Methods of interpretation of the assessment results.

Evidence of content representativeness is particularly relevant if the test is being used to make inferences about the participants’ present level of knowledge and skills (Thornton, 1992, p 188). In the assessment centre context, content validity information is therefore, most relevant when the programme is designed to diagnose current developmental needs, or when the assessment centre is used to measure job-related competencies of applicants.

The procedures set forth in the Guidelines and Ethical Considerations for Assessment Center Operations (Task Force, 1989) are designed to ensure that an assessment centre has content validity (see sub-point 2.6 on page 2-26 for essential features of an assessment centre). Leading researchers and practitioners of the assessment centre method wrote those guidelines.
To summarise, the following steps are necessary to demonstrate content validity:

- Conducting a detailed job analysis.
- Defining behavioural dimensions.
- Designing exercises to elicit relevant behaviours.
- Training assessors adequately.
- Setting up scoring systems.
- Following systematic procedures for data integration.

Although there has been some opposition to the process of content validation of assessment centres when they are used to assess management potential (Sackett, 1987), counter arguments have been offered (Norton, 1981). Thornton (1992, p 188) is of the opinion that evidence of content representativeness is quite relevant to understand the assessment centre process. Such evidence is consistent with the pattern of evidence required by researchers with reference to the overall validity of any test (Binning & Barrett, 1989; Landy, 1986). It is complementary to the results of statistical studies, showing that assessment centres provide accurate predictions of managerial performance.

### 3.3.2 Evidence of predictive validity

There is little question, even amongst the most severe critics of the assessment centre method, that the overall assessment rating consistently predicts a wide variety of criteria for managerial success (Thornton, 1992, p 188).

Table 3.1 in Appendix E, summarises several reviews of research findings with regard to the predictive validity of overall assessment ratings, starting with Byham’s (1970) article in the *Harvard Business Review* and ending with the most recent statistical analysis of prior studies (Gaugler, Rosenthal, Thornton & Bentson, 1987).
In summary, the best estimate of the relationship between overall assessment centre ratings and measures of success in management, is about 0.40. This means that people who obtain higher scores on the overall assessment rating, will probably be more successful on the job than people with a lower score (Thornton, 1992, pp 189-190).

Data from the Management Progress Study summarised in Table 3.2 (Appendix F), clearly illustrates the predictive accuracy of the assessment centre. It can be seen that 48% of the college graduates, who were predicted by the assessment centre to reach middle management, had actually attained this level in 1965, whereas only 11% of those who were not predicted to reach middle management, had succeeded. The figures are even more dramatic for non-college people, where 32% of those predicted to reach middle management, had succeeded in comparison to only 5% of those receiving low ratings. The predictions after eight years and 16 years respectively show even more accuracy, where people assessed highly, were actually promoted to middle management. It can also be seen that many of the low-rated participants with college degrees, were promoted by the 16th year of the study. In this study, the assessment centre results were never revealed to anyone in the organisation and never used for promotion decisions. The results are therefore, a pure measure of predictive accuracy (Thornton, 1992, p 190).

It should be clear from these results that the assessment centre method is valid, and that the overall assessment rating is related to success in management (Thornton, 1992, p 191). It should also be noted that some of the research was performed for purely academic purposes and some for practical use in the organisation. Some studies involved various criteria ranging from progress in management levels, ratings of training or on-the-job performance, and observation by independent researchers of job effectiveness. These studies may be accepted to represent a broad sampling of unbiased viewpoints.
Thornton (1992, p 191) is of the opinion that not all assessment centres have the same level of predictive accuracy. Until recently, it was not easy to determine what caused some assessment programmes to work better than others.

The statistical analysis of studies of assessment centre validities conducted by Gaugler et al (1987), provides valuable information regarding the success of assessment centers. The estimated validity of the final overall assessment rating, after taking into account differences in research methods and statistical features such as size of the samples, was 0.37. There was also considerable variation in validity results above and below this figure. Some variations signifying success were 0.25 or 0.15, where others were as high as 0.55 or 0.65. The standard deviation, which is a measure of the variation of these correlations, was 0.12. The standard deviation is a useful indicator of how much higher or lower than the average of 0.37 the correlations might be.

These facts lead to the following conclusions (Thornton, 1992, pp 191-192):

- The overall assessment rating (OAR) of the assessment centre has predictive accuracy.
- Validities could be generalised across a wide variety of samples and organisations.
- There is considerable variation in the predictive accuracy of the overall assessment ratings derived in assessment centres, studied in the past.
- The predictive accuracy of an assessment centre depends on factors other than differences in the research methods used.

In order to answer the question “What does the accuracy of the assessment centre depend on?”, an analysis was done by Gaugler et al (1987) by studying variables that correlated with the validity of the assessment centre. The idea of some variable correlating with validity may be difficult to grasp. However, Figure 3.1 on page 3-12, illustrates...
this idea by showing that the validity of assessment centres increases with a particular variable, in this case the number of different types of exercises. This relationship is not perfect. It may be assumed that an assessment centre with various different types of exercises, can still have lower validity.

**Figure 3.1: Illustration of a Variable Correlating with the Validity of Assessment Centres**

<table>
<thead>
<tr>
<th>Number of types of exercises</th>
<th>Validity of OAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>0.55</td>
</tr>
<tr>
<td>6</td>
<td>0.40</td>
</tr>
<tr>
<td>5</td>
<td>0.40</td>
</tr>
<tr>
<td>4</td>
<td>0.25</td>
</tr>
<tr>
<td>4</td>
<td>0.30</td>
</tr>
<tr>
<td>3</td>
<td>0.15</td>
</tr>
<tr>
<td>2</td>
<td>0.08</td>
</tr>
</tbody>
</table>

**Source:** Thornton (1992, p 192).

However, Zedeck (1986) is of the opinion that a variable, correlating with validity coefficients, is known as a “moderator variable”. The Gaugler et al (1987) analysis looked at many different types of moderator variables, including characteristics of participants and assessors, features of assessment centre procedures, and types of assessment devices used.

Further evidence that situational variables affect validities, originates from a study where an assessment centre was used to select secondary school principals (Schmitt et al, 1990). It was found that the assessment centre was more accurate in predicting a criterion of effectiveness as perceived by teachers, but, under the following circumstances:

- When a larger percentage of the assessors were principals (as opposed to university professors).
RESPONSES TO ASSESSMENT CENTRES

- When the assessment was conducted in several districts (as opposed to one district).
- When the participants had not previously worked closely with each other.

It can be concluded that the quality of implementation of the assessment centre, is an important determinant of assessment effectiveness.

Moses & Boehm (1975) investigated whether across-exercise dimension ratings for men and women, predicted the management level participants attained between two and 10 years, after participating in an assessment centre. The relationships were meaningful, but not very high. The correlations for the various dimensions ranged from 0.20 to 0.30 for female participants and from 0.25 to 0.38 for male participants.

Similar levels of accuracy were found in a study by Ritchie & Moses (1983), which examined the predictive accuracy of dimension ratings for female participants, seven years after assessment. Wollowick & McNamara (1969) also investigated the predictive accuracy of dimension ratings, three years after assessment. Using a similar criterion, Hinrichs (1978) found that for most dimensions, the accuracy of prediction increased as time after assessment increased. The average correlation one year after assessment was 0.28, compared to 0.42 after eight years. In the only exception, Outcalt (1988) reported an average correlation of only 0.15 in his study of the relationship between across-exercise dimension ratings and job level.

There is fairly consistent evidence that final dimension ratings are meaningfully related to managerial progress, years after the assessment centre.

Three studies investigated the ability of across-exercise dimension ratings, predicting salary progress. Bray & Grant (1966) examined the relationship between nine clusters of dimensions and salary progress. They found that for four samples of men, correlations ranged from -0.41
to +0.57, and that 20 of the 29 correlations were positive and significant. In the second study, the average correlation between across-exercise dimension ratings and salary progress, was only 0.17 (Mitchel, 1975). Lastly, Outcalt (1988) reported significant correlations between eight dimension ratings and salary level, ranging from 0.13 to 0.17.

It appears that dimension ratings predict salary progress less accurately than management level attained, although in at least one study, these predictions are fairly accurate.

Job performance ratings were used as the criterion measures in the next five studies. However, there is mixed evidence. Thomson (1970) found that across-exercise dimension ratings made by both psychologist assessors and manager assessors, correlated with supervisor ratings on the same 13 dimensions, obtained six months to two years, after the assessment centre. Outcalt (1988) found meaningful correlations with a special appraisal of on-the-job performance, using newly developed scales. In another study, Huck & Bray (1976) found that the average correlation between four assessment factors and six job performance dimensions was 0.28 for white participants and 0.18 for black participants. In contrast, Hinrichs & Haanpera (1976) found that all of the correlations between dimension ratings and performance appraisal data were low. Finally, Konz (1988) found that only one of 10 dimensions correlated with a measure of job performance.

To summarise, the results from the above studies suggest that across-exercise dimension ratings predict subsequent management levels quite well, and increasingly so, as time elapses. Across-exercise dimension ratings were also found to predict salary progress and job performance in some studies, but not in others, and usually at a lower level of accuracy.

### 3.3.3 Evidence of construct validity

Construct validity evidence is broader in scope and consists of information that supports or refutes the claim, that the procedure measures the psychological characteristics of interest (American
Educational Research Association et al. (1985). No single study or correlation figure determines what a test is measuring. The accumulated information from many studies must be examined in order to interpret the real meaning of test scores. Evidence of content representativeness and predictive accuracy, as well as evidence reported in sub-point 2.11 (Observing and classifying behaviour) and 2.12 (Group discussion of assessment information) of Chapter 2, must all be considered.

As discussed in sub-point 2.11 (Observing and classifying behaviour) of Chapter 2, assessors can observe behaviours that occur in exercises and classify those behaviours into meaningful dimensions. Ratings on any one dimension of managerial effectiveness by any one assessor, based on only one exercise, may not be very accurate (Thornton, 1992, p 193). A particular problem is that these within-exercise dimension ratings tend to be more highly related to each other, than it should be. A general impression that a participant is “doing well” or “doing poorly” may colour assessor judgements about all dimensions in a single exercise. This tendency may be caused by asking assessors to determine dimension ratings after a single exercise, a practice that is avoided in the behavioural reporting method.

By contrast, when assessors’ ratings on dimensions are based on behaviours across several exercises, their consistency and accuracy is much higher. It was clear in sub-point 2.12 (Group discussion of assessment information) that when several assessors combine their judgements, the consistency and accuracy of final dimension ratings is even higher. Assessors can then integrate all this information across dimensions and give an overall assessment rating that accurately predicts managerial performance and progress (Thornton, 1992, p 194).

Schmidt & Hunter (1977) identified two important aspects from the research evidence by Gaugler et al. (1987). In the first instance, the assessment centre method showed validity generalisation, because of its accuracy in a wide range of situations. After taking into account variations in the research designs and the characteristics of the subjects.
used in the studies, the predictive accuracy of the overall assessment rating is almost always, greater than zero. Secondly, there is still a lot of variation in the predictive accuracy of different types of assessment centres, that have been conducted in the past and they may still show situation specificity. Some of the characteristics that make an assessment centre more accurate, can be identified with further analysis. However, more recent predictive studies showed on average, very substantial relationships between the overall assessment rating and other measures of managerial effectiveness.

At this stage, it can be said with confidence from the evidence described in the last three sub-points (3.3.1 – 3.3.3), that the overall assessment rating of the assessment centre predicts a wide variety of different kinds of criteria. This includes the following criteria:

- Career progress such as promotions and salary increases.
- Success in training programmes.
- On-the-job performance evaluated by subsequent supervisors and by trained independent evaluators.
- Performance on dimensions comparable to those dimensions assessed in the assessment centre.

Lastly, it is necessary to mention a very relevant study that is typical to this research project. According to Byham (1970, p 154), one of the most common kinds of validity checking had been done, where a follow-up study was conducted on candidates who have been assessed at an operating assessment centre, and then promoted and developed by a management team that was aware of the assessment findings. Six such studies reported correlations between assessment findings and subsequent performance. The correlations ranged between 0.27 and 0.64. In one of those studies at IBM, entry level and middle level managers revealed a correlation of 0.37. It seems that in general, assessments of potential for positions above the first level, are more valid than assessments for positions at the first level.
To summarise, properly controlled research on assessment centres has reassured both business executives and professional psychologists working in the personnel area, that the assessment centre method is almost certainly more valid than any other means of identifying and analysing a candidate’s management potential.

Against the background of this empirical investigation with respect to the validity of assessment centres, another fundamental question of “Why do assessment centres work?”, will be addressed in sub-point 3.4.

### 3.4 WHY DO ASSESSMENT CENTRES WORK?

In order to answer this question, various references will be discussed in sub-points 3.4.1 – 3.4.4 respectively.

#### 3.4.1 R. Klimoski & M. Brickner

According to Klimoski & Brickner (1987), there is general acknowledgement that assessment centres do work, in the sense that they predict progress in an organisation, but there is still uncertainty why assessment centres actually do work.

Klimoski & Brickner (1987) identified five alternative explanations (beyond the traditional one) of why assessment centres work. These explanations are the following:

- Traditional explanation.
- Actual criterion contamination.
- Subtle criterion contamination.
- Self-fulfilling prophecy.
- Performance consistency.
- Managerial intelligence.

Each explanation will now briefly be discussed.
3.4.1.1 Traditional explanation

Traditionally, after assessors have made judgements about dimensions or attributes relevant to job success, they derived an overall assessment rating, which is predictive of managerial performance within a particular job.

3.4.1.2 Actual criterion contamination

Assessment centres are expensive and people in organisations want to make use of its findings. The overall assessment ratings can not be kept secret, but are used for operational decisions. Subsequent decisions, such as promotions, salary increases, and even performance ratings are influenced by the assessment ratings themselves. As a result, the relationship of assessments and criteria will be artificially high.

3.4.1.3 Subtle criterion contamination

Assessors are often managers in the organisation, sharing the same biases about what constitutes good management with managers who will later provide performance appraisal ratings. Any evidence of predictive accuracy will therefore, be “contaminated” and consequently spuriously high. Both groups of evaluators may be wrong and may not be evaluating real job performance.

3.4.1.4 Self-fulfilling prophecy

As a result of being selected for and participating in an assessment centre, employees are given the idea that they are competent. They perform well in the assessment centre and get positive feedback. Later, they put forth the effort to develop managerial skills and thereby, verify the assessors’ judgements.

3.4.1.5 Performance consistency

Background data about participants, gives assessors information regarding their past performance, which in turn is then used to predict
future performance. Assessors can predict future performance from present performance, observed in the work-sample exercises and therefore, can avoid using abstract ideas like dimensions.

3.4.1.6 Managerial intelligence

Assessment centre ratings reflect the level of intellectual functioning of candidates, but are not evaluations of managerial performance dimensions as such.

It seems as if the traditional explanation in sub-point 3.4.1.1, is most tenable and supportive of the reasons why assessment centres do work.

3.4.2 D.S. Holmes

Holmes (1977, p 128) is of the opinion that assessment works in assessment centres. In a nutshell, the assessment centre process captures in action much of what has been learned over the years about rating theory and methodology. The process is uncomplicated, thereby precluding many potential sources of error. Special restrictions placed on assessors, for example, evaluating only individuals unfamiliar to the assessors or mixing the composition of assessors and respondents, minimise additional known sources of error. Only relevant dimensions capable of being rated well, are considered. Information that is not useful and potentially misleading, is held to a minimum.

According to Holmes (1977, pp 133-139), there are various reasons why assessment centres are powerful. The reasons are the following:

- Valid overall assessment ratings.
- Predicting behaviour from behaviours.
- Safety in numbers.
- Advantage of working in groups.
- Practice makes perfect.
- Use of behavioural data.
- Behavioural dimensions.
- Better vision.
These reasons will briefly be discussed.

**3.4.2.1 Valid overall assessment ratings**

Evidence of the effectiveness of overall assessment centre ratings is positive, as been indicated in sub-point 3.3.2  *(Evidence of predictive validity)* on page 3-9. The success of predictions relevant to a variety of criteria, indicates that assessors have successfully categorised effective and less effective performers. Information provided to the assessors is sufficient for their creation of accurate and meaningful portraits, as a basis for categorisation  (Holmes, 1977, p 133).

**3.4.2.2 Predicting behaviour from behaviours**

From the assessor’s point of view, assessing has two parts, which is observations, and creation of meanings through the process of inferring from observations. The ability to observe and to infer is central to the activity of assessing. Time is irrelevant to the process of making inferences. However, the assessor’s skill and database of relevant information, is critical to this process. When an assessor moves from stating observations to describing meanings, inferences are utilised and the process is unaltered, whether past, present, or future meanings are described.

**3.4.2.3 Safety in numbers**

One way to decrease errors is to increase the number of chances of being correct. As the number of behavioural dimensions and situations observed increases, the chance of overlooking an important facet of a respondent, decreases. Much duplication exists in an assessment centre to serve as a form of “checks and balances”. These provide the assessor with multiple inputs, which minimise the possibility of unreliability of individual judgement  (Holmes, 1977, p 134).

**3.4.2.4 Advantage of working in groups**

Working in groups, does more than only providing safety in numbers. Respondents provide group support for one another, and keep the focus
on a competitive stimulation in an evaluative atmosphere. The degree of respect that respondents show for one another, also provides an assessor with information about peer evaluation.

In the assessor group, assessors must count on each other for reliable, observational information. Each assessor must be motivated to fulfil his/her responsibilities and to pay careful attention to work quality. Assessors are aware that anything reported, is open to challenge and must be defensible. The assessor soon finds it necessary to take careful notes on behaviour in order to adequately, discharge this responsibility to other team members.

3.4.2.5 Practice makes perfect

If a person practises something correctly in “the right way”, practice makes perfect. In assessment centres, “the right way” is determined by the controlled sequence of exercises and procedures. With standardised procedures, each repetition amounts to practice and improved ability to perform assessments. Assessors develop a frame of reference with experience, which enables them to sort the behaviour observed.

3.4.2.6 Use of behavioural data

Assessments in an assessment centre context are based on the use of verbs and adverbs to a high degree. Assessors are required to communicate in terms of concrete behaviours. Most of the discussion amongst assessors has a factual and observable basis. Assessors remain close to their behavioural information, thereby maximising the likelihood of extracting useful meanings from their observations (Holmes, 1977, p 135).

3.4.2.7 Behavioural dimensions

Good assessment categorisation can be accomplished if the behavioural dimensions have been carefully chosen, and if behaviours relevant to these dimensions, are elicited by the exercises. It is, after all, the individual’s behaviour, not the working environment, which is being
assessed. The validity of assessment centre categorisation therefore, depends on appropriate exercises eliciting measurable behaviours relevant to dimensions, which are operative in the working environment (Holmes, 1977, p 136).

### 3.4.2.8 Better vision

Respondents provide concrete comparison points for one another in an assessment centre. Observers automatically perceive differences along behavioural dimensions amongst respondents, as a function of actual behavioural differences.

Measuring a respondent’s performance along behavioural dimensions, does more than only supplying information about important types of behaviours. It ensures that significant aspects of functioning are not overlooked. It also provides a basis for the creation of a more highly differentiated or more complex portrait of a respondent. This permits a categorisation, based on a richer appreciation of an individual’s potential performance (Holmes, 1977, p 139).

To summarise, assessments in an assessment centre context are powerful, because they are based upon concrete, undeniable facts of an individual. Experience, wisdom, and information-processing capabilities of managers are utilised in this process. The assessment centre technique represents a compatible marriage among the skills of observers and decision makers, the recognition capabilities of humans, and a structured set of procedures. In this instance, the process of non-evaluative observation, creation of meanings, and judgemental decision-making are separated.

### 3.4.3 R. Wood & T. Payne

Wood & Payne (1998, p 154) claimed that assessment centres offer the best chance of making good selection decisions, specifically when the quality of the remaining candidates is high and fine distinctions have to be made. Once a small number of likely candidates have been identified,
the assessment centre can provide detailed information on their strengths and development needs, helping to make an informed decision.

There are several plus points for assessment centres, as been identified by Wood & Payne (1998, p 155). They are the following:

- Good validity evidence.
- Providing a realistic job preview.
- Favourable candidate reaction.
- Involvement of line managers.
- Strategic value.

Each plus point will now be discussed.

3.4.3.1 Validity evidence

Assessment centres have been studied closely over recent years. One consistent message, which emerges, is that well designed assessment centres are the best measures of potential, and therefore, the best predictors of future job performance (Wood & Payne, 1998, p 155).

A recent meta-analysis, which is a statistical aggregation of many studies, found that assessment centres measured potential and predicted future performance well. It seems as if validities were higher when:

- The percentage of male respondents was low.
- A larger number of exercises were used.
- Assessors were psychologists, and not managers.
- Peer evaluation was used.

Concerning the first point, the explanation may lie in the greater propensity of males to impress at the assessment centre, but to fail later on, perhaps through over-promotion relative to females. A related result concerns people from ethnic minorities. For predicting promotion decisions, validities were higher when the percentage of ethnic minorities was low. This could have been because organisations were promoting ethnic minority candidates, even though they had low competency scores.
or, more likely, that they were not promoting them, even though they had high competency scores.

### 3.4.3.2 Realistic job preview

An important aspect of recruitment is the management of applicants’ expectations. Those applicants with a more realistic expectation of what the job involves, show greater commitment, greater job satisfaction and better performance on the long-term (Wood & Payne, 1998, p 156). The beauty of assessment centres is that, if exercises are designed correctly as micro-simulations of the job, then they serve as an excellent, realistic job preview. The purpose of the exercises therefore, is to provide evidence on specific competencies, as well as a realistic preview of what the job entails.

### 3.4.3.3 Candidate reaction

Wood & Payne (1998, p 156) emphasise the two-way nature of the recruitment and selection process. Candidates have a choice too, and recruitment staff must recognise the impact their selection procedures have on the candidates’ perception of them, and on the decisions the organisation is making. Assessment centres are regarded by those on the receiving end, as a fair and valid way of making a selection decision. Although unsuccessful candidates tend to see assessment centres in a less positive light, it seems that most candidates experience assessment centres in a positive way, relative to other selection methods.

### 3.4.3.4 Involvement of line managers

When selection decisions are made centrally, without input from the person who will eventually manage the appointee, problems can occur. It is vital to get buy-in from a specific line manager to any appointment, and to involve him/her in the selection process. Assessment centres offer a great opportunity for doing this. Once line managers are trained in the key skills of assessment, they can decide on the basis of their observations, which candidate to appoint. Any problems that occur later, will be a result of their own decisions, and so the incentive is there for
them to work hard at making the appointment work (Wood & Payne, 1998, pp 156-157).

### 3.4.3.5 Strategic value

Competencies have value because they provide a way of integrating human resource strategies (Wood & Payne, 1998, p 157). Using assessment centres for selection will generate information on individuals, which can be plugged into other human resource processes. Any individual, who is recruited through an assessment centre, can be given feedback regarding his/her strengths and development needs, expressed in competency terms. This information can then be used to put together a personal development plan, which will feed in to the annual performance review. If the personal development plan becomes a living document and is kept up to date, it has value for career planning and could impact on promotional opportunities. The assessment centre method fits well within the strategic human resource framework.

The conclusion can be made that there are a lot of benefits when implementing an assessment centre, as part of a competency-based selection procedure.

### 3.4.4 W.C. Byham

Byham (1970, pp 151, 154-155) is of opinion that the assessment centre method, is much more accurate than traditional appraisal procedures. There is also a number of other added dividends accrued from assessment centres. These two aspects with reference to the accuracy of assessment centres, and other indirect benefits related to this method, will briefly be discussed as reasons why assessment centres do work.

#### 3.4.4.1 Accuracy of assessment centre method

While the weight of research is heavily on the side of the assessment centre, this alone does not account for the method’s phenomenal acceptance by management, which is less influenced by correlation coefficients than by evidence of the adequacy and fairness of a
procedure (Byham, 1970, p 154). Accurate judgements also convince management when assessors integrate observations from various exercises, in order to build a picture of how a candidate will perform in a senior management position.

Byham (1970, p 151) gave the following reasons why the assessment centre method is an accurate technique to be utilised in a selection process:

- The exercises used, are designed to bring out specific skills and aptitudes, needed in the position(s) for which a group of candidates is being assessed.
- Since the exercises are standardised, assessors evaluate the candidates under relatively constant conditions, and are able to make valid comparative judgements.
- Assessors usually do not know the candidates personally, and being emotionally disengaged, they are unbiased.
- Assessors are shielded from the many interruptions of normal working conditions, and could pay attention to the candidates’ behaviour in the exercises.
- Assessment procedures focus primarily on behaviour that ought to be observed in evaluating a candidate for promotional purposes.
- Assessors have been trained to observe and evaluate these kinds of behaviour.

3.4.4.2 Other indirect benefits

Apart from the explicit goals of assessment, companies have consistently found that a number of added dividends accrued from assessment centres (Byham, 1970, pp 154-155).

The first and most obvious of these dividends, is candidate training. Even when candidate training is not a defined objective of an assessment centre, it does take place. Completing an in-basket exercise, participating in group discussions, and playing management games are genuine training exercises, even if there is no immediate feedback of
results. Such exercises were used as training exercises, long before they were used in assessment centres.

Passing through an assessment centre, has a positive influence on morale and job expectations. Candidates see the assessment centre as a chance to show their ability in fair and realistic situations. They also obtain a realistic idea of the requirements of the position(s) for which they are being considered.

By taking care when designing assessment centre exercises, it is possible to improve candidates' understanding and attitudes, while they are being assessed. Candidates, who for example, are aspiring to a management position, could be sensitised towards staffing problems and how to address it in future.

Finally, by far the most valuable fringe benefit, is assessor training. The actual training of an assessor prior to his/her assignment, is equal to a management training programme. During training, assessors participate in management games, in-baskets, and group discussions, followed by reviews of their performance in each of the activities. The actual participation as an assessor, is an even more important training experience. Almost all of an assessor's training and experience is transferable to his/her job, and should improve his/her ability to interview and appraise his/her subordinates. It is also possible for an assessor-manager, to transfer some of the actual exercises from an assessment centre, to the everyday work situation.

While these fringe benefits are important individually, they are even more important when functioning as an integral whole. They indicate what may be the crucial advantage of the assessment centre method over other supplementary methods of identifying managerial potential. Add to this the element of accuracy, and the result will be very satisfying for all parties concerned.
The next question that needs to be answered is “Why do assessment centres fail?”. This question will be addressed in sub-point 3.5.

### 3.5 WHY DO ASSESSMENT CENTRES FAIL?

In order to answer this question, various references will also be discussed in sub-points 3.5.1 – 3.5.4 respectively.

#### 3.5.1 G.C. Thornton

Thornton (1992, pp 215-217) is of the opinion that there are several possible reasons why assessment centres are failing. They are the following:

- Poor planning.
- Time-consuming preliminary work.
- Unrealistic view on assessor training.
- Misusing of assessment results.
- Bad assessment results.
- Lack of senior management support.

Each reason will briefly be discussed.

#### 3.5.1.1 Poor planning

Some assessment centres fail before they ever get started, because of poor planning (Thornton, 1992, p 215). The appropriate people are not involved in the preliminary discussions. Not enough care is taken to enlist the support of senior management in order to champion the idea of an assessment centre. In other cases, the assessment centre is not the appropriate solution to a human resource problem, and simply not adopted.

#### 3.5.1.2 Time-consuming preliminary work

Some assessment centres are never implemented, because the preliminary work was more burdensome than the organisation had anticipated. During the job analysis or exercise development phase, the
organisation sometimes decides these efforts are too time-consuming and not a priority, especially when more time must be spent on operational matters.

3.5.1.3 Unrealistic view on assessor training

In other organisations, assessor training could be an issue that needs to be managed. Assessors do realise how much work would be involved and therefore, decide not to be trained. Assessors could also have a negative attitude towards the practical feedback sessions, and have the same influence on other assessors in the team (Thornton, 1992, p 216).

3.5.1.4 Misusing of assessment results

Other assessment centres are failing, because the results are misused or not used at all. A common problem is that the findings from a diagnostic or developmental programme are used to make promotional decisions. The credibility of subsequent efforts is then destroyed. In a case where results are not put to use, expectations are created amongst employees participating in the assessment centre, resulting in widespread dissatisfaction. This type of situation could be avoided if the assessment centre techniques are embedded in a human resource system of coordinated activities.

3.5.1.5 Bad assessment results

Some assessment centres fail because evaluations show they do not predict success. There is no conclusive relationship between the evaluations and future performance on the job. The reason for this might be that the assessment centre evaluations were faulty, or that job performance was not measured accurately.

3.5.1.6 Lack of senior management support

Assessment centres sometimes fail due to a lack of support from senior managers in the form of time, money, facilities, and verbal endorsement. Support from key executives is especially important for developmental
assessment centres, which rely heavily on managerial follow-up activities. In many organisations, top executives focus more on the technical or financial success of the business than on developing people. They do not see the need for special diagnostic and training efforts, and might not know how to use the results of the assessment programme. As a consequence, middle-level managers serving as assessors, might become discouraged about the usefulness of the assessment centre. If top executives do not recognise and reward good performance by the assessors, the assessment staff will begin to believe that the programme is of no value and become lax in their duties. A result of this problem is that assessors take shortcuts and produce poor quality reports and feedback (Thornton, 1992, pp 216-217).

It is clear from these pitfalls that specific elements under certain assessment conditions, must be in place to secure a value-adding and successful assessment centre.

3.5.2 R. Wood & T. Payne

Wood & Payne (1998, pp 157-161) identified five possible fault lines to be taken into account when implementing a successful assessment centre. They are the following:

- Cost.
- Over engineering.
- Skimping on assessor training.
- Fairness.
- Measured versus non-measured.

These fault lines will briefly be discussed.

3.5.2.1 Cost

There is no doubt that assessment centres are expensive. They are expensive to develop, to run, and to maintain. However, recruitment mistakes can have a costly effect on total annual remuneration, linked to
the specific position the candidate is applying for. Getting the right assessors and the right exercises is what matters. There is no point designing the best assessment centre from a financial point of view, if an organisation can not resource it with trained line managers (Wood & Payne, 1998, pp 157-158).

3.5.2.2 Over engineering

Sometimes assessment centre designers are working too hard to make simulation exercises perfect, by designing a simulation of a particular job that very few people will be able to complete. It certainly identifies those who could do the job, but is de-motivating for those who are making very little progress. There is a need for compromise when designing assessment centre exercises. The approach of “the simpler the better” is more effective in this instance. Some designers are also not realistic in the overall design of the event, when the duration of the assessment centre is too extensive. It is then difficult to persuade assessors to spend a specific time period, assessing and discussing candidates (Wood & Payne, 1998, p 158).

3.5.2.3 Skimping on assessor training

In some organisations, not enough money and time is spent to train assessors for assessment centres. In their untrained state, assessors commit the cardinal sin of introducing information about candidates from outside the assessment centre. Assessors also make use of their gut feelings, on which they base their observations. An unstructured interview can then be used where assessors look for evidence to confirm or contradict their prejudices. In the case where assessors are not trained properly, this can result in assessors selecting people, who display similar characteristics as themselves (Wood & Payne, 1998, p 159).

3.5.2.4 Fairness

Very few organisations pay attention to equal opportunity issues in the design, development and running of assessment centres. Organisations
do not know whether adverse impact or unfair discrimination is actually occurring within their assessment centres. Women, ethnic minority groups and disabled candidates are normally excluded. This results in organisations as potential employers, to have a “blind faith” in assessment centres, which could be a very powerful tool when utilised in the right context (Wood & Payne, 1998, p 159).

3.5.2.5 Measured versus non-measured

Wood & Payne (1998, pp 159-160) is of opinion that assessors are rating overall performance on each exercise, rather than distinguishing between the various competencies as identified. This means that assessors are making global judgements where there is an opportunity for subjective bias, which is having a negative impact on the purpose of the assessment centre in general. In reducing this effect on the exercises respectively, the validity of assessment exercises will increase, and this will improve the effectiveness of the assessment centre as a whole.

It is necessary to take note of these fault lines whenever an assessment centre is implemented, and to learn from previous experiences.

3.5.3 A.I. Kraut

Kraut (1973, p 179) identified potential difficulties when introducing an assessment programme. For the effective functioning of an assessment centre, certain conditions must be in place. If not, an assessment centre will definitely be unsuccessful, when the following conditions are present:

- The nature of the programme is not well communicated, particularly to top management, and their support not obtained for at least a trial programme.
- Administrators are not trained to conduct the programme in a consistent way, by having an understanding of the behavioural and administrative foundations of a successful programme.
- Appropriate changes are not made, after receiving feedback during the pilot phase, on problems associated with the technique by means of interviews or questionnaires.

As with any other cross-national innovation, it is important to examine possible reasons for resistance to a programme of this quality, as these potential difficulties could be the reasons why an assessment centre is failing.

3.5.4 W.C. Byham

Most managers ask the following two questions when assessment centres are explained to them: “What happens to the candidates who are not selected for the assessment centre?” and “What happens to the candidates who do not perform adequately in the assessment centre?”.

According to Byham (1970, p 159), there are two negative effects, surfacing from an assessment centre. They are the effect of not being selected, and the effect of not performing adequately, which will be discussed.

3.5.4.1 The effect of not being selected

The effect of not being selected depends primarily on how the assessment centre has been set up within an organisation (Byham, 1970, p 159). In some organisations, assessment centres have achieved the status of management development programmes. Just as a young executive may feel the need to attend a management development training programme, he/she may also feel the need for assessment. In these situations, anxiety develops amongst individuals who were not selected, but to no greater extent than from failure to be selected for any other development activity.

3.5.4.2 The effect of not performing adequately

Candidates, who do not perform adequately in assessment centres, are usually quite aware of their performance. A logical response from a
candidate, who has performed inadequately, would be to start looking around for another job. Whether this response actually happens, is unclear. One study indicates a higher turnover amongst poorly rated candidates, but other studies find no differences between these groups (Byham, 1970, p 159).

Turnover amongst poor candidates may be viewed in different ways (Byham, 1970, p 159). Some organisations see a moderate amount of turnover as beneficial, in that “dead wood” disappears and opportunities for advancement are increased. However, if the candidate represents an investment to the organisation in terms of valuable experience or technical knowledge, losing him/her might be a disaster. In this instance, the key to prevent turnover is to apply the most suitable method when feedback is provided to the candidate on assessment results obtained.

These two negative effects of assessment centres must also be taken into consideration as possible reasons why assessment centres are failing.

Having observed why assessment centres fail, it is necessary to look at ways to address these problem areas.

3.6 CONDUCTING SUCCESSFUL ASSESSMENT CENTRES

In order to avoid many of the problems discussed in sub-point 3.5, two general strategic principles should guide the human resource manager in the development and implementation of an assessment centre. Firstly, the assessment centre must be technically sound, and secondly, the assessment centre must be utilised together with complementary programmes, in order to fit into the larger human resource system of the organisation (Thornton, 1992, p 217).

In the light of these two principles, the following aspects will be discussed:
- Building a sound assessment centre.
- Embedding the assessment centre in the human resource system.
- Promotion programmes.
- Diagnostic and development programmes.
- Training and organisation development programmes.

3.6.1 Building a sound assessment centre

Thornton (1992, pp 217-218) is of the opinion that developing a good assessment centre, involves philosophical, technological and administrative related responsibilities.

The philosophical related responsibilities involve writing a clear statement on the purpose of the programme, and changing the policies governing its operation. The policy statement should address the following aspects:

- Objectives of the assessment centre.
- Process of selecting participants.
- Selection, training and certifying of assessors.
- Utilisation and access to assessment reports.
- Evaluation of assessment programme.

Compiling a brochure for distribution to prospective participants, will enhance the organisation’s judgement on the assessment centre. However, the organisation is obliged to inform participants in advance about the contents of the programme. The following information should be provided:

- Objectives of the assessment centre.
- Process of selecting participants.
- Alternatives to participation and consequences if not participating.
- Composition of the assessor team and how assessors will be trained.
- Utilisation of test material.
- Utilisation of assessment results.
- Feedback procedures.
- Opportunities for re-assessment.
- Specific individuals who has access to reports.
- Specific individuals who is responsible for administering the programme.

As far as the technological aspects of an assessment centre is concerned, it is necessary to perform the following actions:

- Conducting a detailed job analysis.
- Selecting the right dimensions.
- Designing appropriate exercises.
- Preparing supporting materials.
- Training assessors.

The administrative related responsibilities of running an assessment centre, are critical to its success. Many details of operations must be planned with circumspection, including the location of the assessment centre, materials to be used, and schedules drawn-up for all parties concerned. A human resource manager in charge of an assessment centre, might gain valuable tips on its operation by either obtaining training from a consultant specialising in assessment centre programmes, or by attending seminars, or by visiting an organisation that is currently implementing an assessment centre.

3.6.2 Embedding the assessment centre in the human resource system

The second strategic principle guiding the success of an assessment centre, is to ensure that the programme is part of a well co-ordinated system of human resource practices. No assessment centre can stand alone in an organisation. Each assessment centre must be an integrated part of the larger human resource management system. This principle applies to all types of assessment centres, especially when they are used for promotion, diagnosis, or training (Thornton, 1992, pp 218-219).
3.6.3 Promotional programmes

A promotional assessment centre should be just one part of a set of selection procedures, which assesses the qualifications needed for success in senior level positions (Thornton, 1992, p 219). Other assessment procedures might include the following:

- A review of credentials and previous experience by the human resource department.
- A performance appraisal by the immediate supervisor on the current job.
- A set of tests to measure basic skills and knowledge.
- An interview by a human resource specialist.
- An interview by a manager in a hiring capacity.
- A medical examination.

Thornton & Byham (1982) described how an entire system of personnel activities, could be built around a list of well-defined dimensions of job effectiveness. Any one dimension should be assessed by more than one procedure. For example, oral communication skills might be assessed not only in several interviews, but also in a performance appraisal, as well as in the assessment centre. On the other hand, delegation abilities might be assessed not only in the assessment centre, but also in the interview with the manager, responsible for the appointment. This approach is effective, if there is a written plan or competency matrix for gathering co-ordinated pieces of assessment information.

3.6.4 Diagnostic and development programmes

According to Thornton (1992, p 219), a diagnostic assessment centre should be the first step in a well-planned system, whereby training needs can be identified, developmental training be performed, and actual training conducted. This system might include the following elements:

- An assessment centre.
- A career-planning activity.
- Multiple feedback sessions.
- A developmental planning activity.
- Training in coaching skills for managers.
- A revised performance appraisal in which managers are evaluated on their accomplishments in developing their staff members.

The assessment centre itself, could be just one part of a more complex system of human resource programmes, needed to foster managerial development. Other parts of the system are targeted at the individual’s motivation to take advantage of the assessment centre results, the follow-up training activities, and the skill and motivation of the manager respectively (Thornton, 1992, p 222).

3.6.5 Training and organisation development programmes

An assessment centre, primarily designed to improve managerial skills and develop teamwork amongst managers, needs a different system of support (Thornton, 1992, p 222). For this application, the climate of the broader organisation must be compatible with the values and goals of the assessment centre programme.

The principles of the training programme must also be supported in other ways in the organisation, for example, in statements of the chief executive officer, specific actions by top management, dealings with unions and external organisations, and decisions and practices in the personnel office. Changing the way an organisation operates, is not easy. The entire burden can not fall on an assessment centre, or any other technique, used for management training.

Against the background of these two strategic principles, are specific conditions that affect the utility of an assessment programme (Kraut, 1973, p 180).

As with other selection tools, the assessment centre is more likely to be useful when a large pool of candidates exists. The selection device from the larger pool will be of greater value, even if it is only moderately...
effective. The selection method must be a valid way of measuring relevant behaviours, as well as an improvement on existing selection techniques (Kraut, 1973, p 180).

Certain organisations that prefer to use assessment centres, revealed several conditions impacting on their choice (Kraut, 1973, p 180). One such condition, very likely to occur in large organisations, is when the available pool of talent within the organisation, is unknown to them. Similarly, a rapid surge in growth creating a need for new managers, which is either unanticipated or difficult to satisfy, also stimulates a need for an assessment centre. Another notable stimulus is a feeling of dissatisfaction with the existing situation, a lack of management effectiveness, or even some dramatic cases of failure. A related factor is simply that of senior management becoming aware of a better selection technique, preferred to whatever they are currently using. Another factor is that management failures are costly in some countries, where legislation prohibits the removal of managers from their positions. This makes it extremely difficult to replace or reduce the level of employees, therefore making initial selection decisions critical.

One condition that appears to be universal, is that organisations implementing assessment programmes, are financially successful, can afford to evaluate personnel management innovations, and are consciously interested in enhancing the success of their organisation.

Even in the most achievement-orientated societies, there is an occasional question about the morality of the assessment centre, as a basis for making career decisions. Most concerns about the morality of assessment programmes, are due to a failure to look critically at current used systems of promotional decision-making (Kraut, 1973, pp 180-181). It is important to take note of the fact that promotional decisions in an organisation are continually being made, even in the absence of assessment centres, and usually on a far less adequate basis.
To appreciate the effects of an assessment programme, it must be compared to the effects of the existing promotional system. An assessment programme is so visible and explicit, that it is likely to encourage career decisions to be made more openly and objectively, with agreed upon standards, and based on data that are systematically gathered and relevant to the career decision. Several features of an assessment centre, which are superior to the typical promotional system with its heavy reliance on the immediate manager, are shown in Table 3.3 (Appendix G).

In the next sub-point, the utility of assessment centres will be addressed, including a comparison between benefits and costs.

### 3.7 UTILITY OF ASSESSMENT CENTRES

A human resource management procedure has utility, if the benefits from the technique, exceed the costs by some significant amount (Thornton, 1992, p 202).

According to Cascio (1982), utility is a way of thinking about various costs and benefits, that result from the use of a selection or training procedure. Whereas validity evidence gives an indication of the extent to which the test correlates with measures of job performance, utility indicates whether job performance improvements in employees selected using the new assessment procedure, are enough to justify the costs of administering the test. Utility analysis requires that the new test be compared with the organisation’s existing selection procedure, in order to demonstrate that there is some improvement in the benefit-cost ratio.

The following aspects will now be discussed:

- Costs of an assessment centre.
- Financial returns of an assessment centre.
- Profitable spin-offs from an assessment centre.
3.7.1 Costs of an assessment centre

All investments involve certain risks in the business world. Most organisations considering the use of an assessment centre, places a great deal of emphasis on the costs and financial returns that it might entail.

Van der Maesen de Sombreff & de Veer (1997, pp 148-151) identified three important cost categories. They are the following:

- Development costs.
- Performance costs.
- Costs of quality control and evaluation.

Each cost category will be discussed.

3.7.1.1 Development costs

A great deal of time and effort is put into the development of assessment centres. Sometimes the assessment centre is developed internally by the organisation itself, or else by an advice bureau, whereby the assessment centre is structured by using standard components on hand. In this case, the organisation would pay for the development costs indirectly via the acquisition price. Organisations can write off development costs over the number of participants and number of years, that the assessment centre is utilised. Assessment centres will have to be revised or updated from time to time if, for example, the target job is altered, or if participants are too familiar with the assignments (Van der Maesen de Sombreff & de Veer, 1997, p 148).

Development costs can be sub-divided into costs involved in employing trainers, contractors’ costs and administrative support costs (Van der Maesen de Sombreff & de Veer, 1997, p 149).
Costs involved in employing trainers, include the following:

- Development of the assessment centre programme.
- Job analysis and critical incident interviews.
- Development of assignments and score instructions.
- Writing of instruction booklets.
- Development of training courses for assessors and role-players.
- Trial runs and consultation sessions between the contractor and trainers.

Contractors’ costs refer to time spent with trainers in consultation, in critical incident interviews and trial runs.

In the event of external contractors, administrative support costs will be directly expressed in declarations. However, there are two options for the cost of internal staff. Whilst the assessment and development of future staff is an essential task within an organisation, and forms an integral part of management responsibilities, managers should not demand additional remuneration for their duty in an assessment centre. Alternatively, a calculation for the cost of labour performed by internal employees, could also be made, based for example, on the cost estimate of an internal accounting service.

**3.7.1.2 Performance costs**

According to Van der Maesen de Sombreff & de Veer (1997, p 150), performance costs include the following cost elements:

- The cost of the trainer and trainee assessors in attending assessor-training courses.
- The cost of sending invitations and organising a location to conduct the assessment centre.
- The cost of trainers, assessors and candidates attending the assessment centre.
- The cost of administrative and organisational support to ensure that, for example, material is supplied and refreshments served.
3.7.1.3 Costs of quality control and evaluation

In order to assess the effectiveness of an assessment centre and make the necessary alterations, research has to be performed. It is best to allocate this expense as a separate entry. As in the case of development costs, these expenses can be written off over a long period of time and spread over various candidates.

Quality control consists not only of gathering data for research into the predictive value of an assessment centre, but may also involve research into the psychometric quality of assessments, or research into experiences of both candidates and assessors. Investment in research is worthwhile, because research provides insight into how an assessment centre can be more effective. Contractors and candidates may also ask for proof of an assessment centre’s effectiveness (Van der Maesen de Sombreff & de Veer, 1997, p 151).

The cost element in implementing an assessment centre programme is now clear. The next step is to calculate the financial return of an assessment centre by using a utility model.

3.7.2 Financial returns of an assessment centre

Van der Maesen de Sombreff & de Veer (1997, pp 153-154) is of the opinion that the utility model of Brogden, Cronbach and Gleser is designed to calculate the added returns of selection procedures. This model will therefore, be able to provide an answer to the following question:
“If we compare an employee who was selected by an assessment centre, with an employee selected by conventional procedures, how much more money is he/she worth, in terms of productivity and the services that he/she provides?”.

However, the following elements in the utility model, will first be discussed:

- Standard dollar deviation (SDD).
- Selection ratio (SR).
- Validity and cost of alternative procedures.

Thereafter, the formula for the utility model will be explained.

### 3.7.2.1 Standard dollar deviation (SDD)

Candidates attending an assessment centre, usually apply for a particular job in an organisation, where a certain turnover expectation is attached to the job. The greater the turnover expectation, the higher the value of the job for the organisation, and the higher the damage to the candidate who fails.

The salary usually determines the value of the job. Standard dollar deviation (SDD) is a system of measurement, that relates to the value of a job, or the risk of damage it entails (Van der Maesen de Sombreff & de Veer, 1997, p 154).

Organisations are well aware of the fact that performance levels differ among employees. It is necessary to ascertain how employees perform in their jobs, as well as their differences in terms of productivity. This difference can for example, be expressed in dollars. Research indicates that SDD can be calculated by subtracting 40% from the annual salary figure.
3.7.2.2 Selection ratio (SR)

Organisations usually appoint employees by selecting a suitable candidate from a group of applicants. The selection ratio (SR) is the relationship between the number of vacancies and the number of applicants, applying for the same job.

3.7.2.3 Validity and cost of alternative procedures

In order to calculate the returns of an assessment centre in comparison with traditional methods, the validity and costs per candidate from the traditional procedure, will have to be determined.

As a formula, the utility model is expressed as follows (Van der Maesen de Sombreff & de Veer, 1997, p 155):

\[ \text{Added utility} = (R2 - R1) \cdot (SDD) \cdot M - (C2 - C1) / SR \]

- \( R2 \) = the validity of the new method (in this case, an assessment centre).
- \( R1 \) = the validity of the old method (for example, an interview).
- \( C2 \) = the cost of the new method.
- \( C1 \) = the cost of the old method.
- \( M \) = the average score of candidates in the selection procedure, which is related to the selection ratio (SR).

It is important to note that the first part of the formula is related to the difference in benefits, while the second part is related to the difference in costs.

However, there are some critical aspects towards this model, as expressed by Van der Maesen de Sombreff & de Veer (1997, p 157). The model is based on the assumption that candidates with the highest results, will accept the job. This is not always the case. Sometimes candidates refuse the job offer and accept a job elsewhere, or at times the organisation might opt for someone else. Purely in business terms, when calculating the added returns, it is probably more logical to take into
account, the returns that the investment could have achieved elsewhere, for example, on the capital market. Another critical aspect is that the model also overlooks other areas in which the assessment centre can be profitable.

The utility model clearly shows that it is not very businesslike to consider the cost of a selection procedure in isolation from other factors. It indicates that a relatively expensive method like the assessment centre, can be a profitable alternative to, what may on the surface appear to be, cheaper methods of selection.

The assessment centre has a number of profitable spin-offs that are not shown in the utility model. These will be discussed in sub-point 3.7.3.

### 3.7.3 Profitable spin-offs from an assessment centre

Van der Maesen de Sombreff & de Veer (1997, p 157) identified the following beneficial spin-offs from an assessment centre:

- Participation in an assessment centre by internal assessors encourages more commitment to assessment and selection than any other method.
- Managers improve their skills in this area and apply it in their day-to-day work.
- Managers learn more effective means of communication.
- Managers learn how to observe more keenly and are supplied with methods, which can help them to provide feedback more efficiently.
- The process of compiling assessment centre reports makes managers better equipped to conduct career interviews.
- Due to the practical nature of assignments, candidates become familiar with the organisation and the job that they are applying for, which implies that less time is needed in preparing the successful candidate for the job and assessment centres therefore, can save on expenses.
According to Thornton (1992, pp 208-209) there are also other secondary benefits deriving from implementing the assessment centre method.

Participants learn more from the assessment centre experience than from paper-and-pencil tests or one-on-one interviews. In an assessment centre, participants gain insight into their own styles of behaviour, and can observe the ways in which other participants handle the same situations. Participants also benefit from the feedback they receive at the end of the programme. Even with the often limited feedback that accompanies a selection or promotional programme, participants learn how the assessors evaluate their decision-making and interaction styles. Although no formal follow-up activities may be planned to rectify deficiencies, individuals can use the results to launch their own self-development plans.

As mentioned above by Van der Maesen de Sombreff & de Veer, Thornton (1992, p 208) as well claimed that assessors also benefit from their service as part of the assessment centre team. Through assessor training and their interactions with other assessors, managers learn valuable lessons about management, principles of behavioural observation, standards for evaluating subordinates, and successful decision-making techniques.

Setting up an assessment centre, could have additional benefits to the organisation far beyond those mentioned. Alon (1977, p 229) has pointed out that there were many positive effects on his organisation, following the assessment centre. Working together on the definitions of dimensions and the assessment of candidates, led to a better alignment of perspectives among all levels of management with reference to a model of supermarket store manager. Managers learned from each other about the behaviour that contributes to the effective operation of the entire organisation, thereby furthering the development of the organisation itself.
Finally, in a field study of 600 first-level managers, Cascio & Ramos (1986) compared the utility of assessment centre predictions to those generated from multiple interviews. They found that the cost of the procedure was incidental compared to the possible losses associated with promotion of the wrong person into a management job. Given large individual differences in job performance, the use of a more valid procedure has a substantial profitable impact. The use of the assessment centre for selecting managers instead of the multiple interview procedure, resulted in an improvement in job performance of about $2,700 annually per manager. If the average manager stays at the first level for five years, then the net payoff per manager will be over $13,000.

In another study, Hunter & Hunter (1984) concluded that in the case of federal entry-level jobs, substitution of a less valid predictor for the most valid ones (ability and work sample test), would result in productivity losses, costing from $3.12 billion to $15.89 billion per year. Hiring on the base of ability alone, has a utility of $15.61 billion per year, but it affects minority groups adversely.

The next sub-point will have a look at the assessment centre as a supplement to other methods of predicting future performance.

3.8 COMPARISON BETWEEN ASSESSMENT CENTRES AND OTHER ASSESSMENT PROCEDURES

The assessment centre method is similar to that of some assessment procedures, but also quite different from others.

Alternative personnel assessment methods include the following (Thornton, 1992, p 4):

- Background interviews and application forms reviewing educational and work-related experiences.
- Paper-and-pencil tests measuring mental abilities, interests, and personality characteristics.
RESPONSES TO ASSESSMENT CENTRES

- Single performance tests or work-sample tests measuring specific competencies.
- Performance appraisals and peer evaluations evaluating effectiveness on the current job.
- Clinical assessments by individual psychologists using various combinations of tests and interview methods.

Each of these methods has strengths, and many have been found effective in predicting managerial success.

However, what is special about the assessment centre method, is the way various individual assessment procedures are used in combination with each other (Thornton, 1992, p 4). The following assessment features might be present in an assessment centre, which has already been discussed in Chapter 2:

- Several different types of assessment techniques such as tests, situational exercises and interviews.
- More than one situational exercise, representing important elements of the target job.
- Observation of complex behaviours relevant to managerial competencies.
- Multiple assessors that usually include senior level managers.
- A systematic process of pooling observations and integrating evaluations.

The result of an assessment centre is an evaluation of several managerial competencies, and in many cases, an overall evaluation of potential to succeed in target jobs.

Holmes (1977, p 140) is of the opinion that assessment judgements can be formulated in two ways: by using human judgement, or by using mechanical or clerical procedures such as actuarial tables or mathematical formulae.
In theory, it would appear that mechanical assessments could succeed as well as, or better, than judgemental assessments (Holmes, 1977, p 140). A number of research studies have been reported in which computers, using mathematical formulae or actuarial tables, have outperformed human assessors in certain assessment centre situations. Furthermore, highly experienced psychologists have constructed, at great cost, computer programmes interpreting the profiles of specific psychological tests. These psychologists have preferred the computer printouts to their own spur-of-the-moment interpretations of test responses.

The functional superiority of actuarial tables, mathematical formulae, and computer programmes versus human judgemental assessments depends on two specific factors. In the design stage of these mechanical devices, great care can be taken to ensure that each component is based on comprehensive, accurate information. However, through a process of trial-and-error, the decision-making procedures of the device can also be perfected.

Although mechanical assessments can in theory be effective, in practice, it may not work that well (Holmes, 1977, p 140). Most of the scientific studies purporting to demonstrate the superiority of mechanical assessments to judgemental assessments have been found lacking with respect to research design and rationale (Holt, 1970). However, judgemental assessments have demonstrated validity when “expert” assessors have put themselves to the test (Cronbach, 1970), and when assessment centre procedures have been used (Cohen, Moses & Byham, 1974).

Ultimately, a choice between mechanical or judgemental assessments depends on certain practical considerations (Holmes, 1977, p 140). These considerations are the availability of personnel and facilities, the issue of relative costs and benefits, and how coarse or fine the screening of respondents is required. A quick, preliminary assessment of “acceptable” and “questionable” categories might call for mechanical
assessment, if the possible consequence of misclassification, is not too serious.

Broadly conceived within an assessment centre framework, practically any form of assessment can be utilised. Nothing prevents mechanical assessment procedures from being used in the form of intelligence tests and current events tests. Likewise, some judgemental assessment techniques, requiring interpretations from a highly trained professional assessor, could also be included in some assessment centres, where a clinical psychologist does interpretations of projective test results.

The fact that the assessment centre technique can include practically all forms of assessment, ensures its future viability. Professional assessors, familiar with judgemental assessments, prefer it primarily because of the advantages described earlier. A single assessor working with a single respondent is at a disadvantage, because of the assessor’s inherent inability to exceed personal limitations. In addition, there is a hindrance of intrinsic difficulties to infer a range of interpersonal behaviours in diverse situations, without access to actual observed samples of such behaviours (Holmes, 1977, p 141).

It seems that assessments within the assessment centre context, appear to be of substantial merit, both in theory and in practice.

However, the demonstrated validity of assessments may vary, considering the specific situation and number of times in which assessments are performed (Holmes, 1977, p 141). For example, it might be argued that assessment centres are successful at identifying the degree to which individuals are motivated to learn and to perform the role of a manager, as well as the degree to which they possess those potential abilities required for effective role performance. If the nature of managerial roles were to change in the direction of greater self-expression and individuality, the balance of assessment techniques and procedures might also have to change in order to retain a capability for creating portraits of respondents, which relate accurately to on-the-job
performance. In this instance, projective techniques and interviews are relatively more useful than leaderless group discussions in assessing directions of self-expressive tendencies, whilst the opposite is the case with respect to leadership performance in groups.

Currently the situation may be that optimal assessment of individuals for senior management positions, requires more emphasis on measures of self-expressive tendencies. The reason being that self-expressions by senior managers have a greater impact in a work situation than in the case of middle or junior managers. In any event, the broad range of assessment technologies feasible within an assessment centre format, will provide a capacity for meeting a wide array of assessment challenges (Holmes, 1977, p 141).

3.9 SUMMARY

Enough is known about the validity and benefits of assessment centres, and why it adds value to an organisation to encourage optimism about the likelihood of developing and maintaining effective assessment centres for a variety of purposes. Over decades improvements in assessment techniques and procedures have been developed, which correspond optimally with what assessors are capable of doing most and least effectively.

The three key points or disputes in question as identified in sub-point 3.1 (Introduction) of this chapter, have now been addressed. These key points were the ability of assessors to make judgements on separate dimensions of managerial effectiveness, the need for the integration discussion amongst assessors, and the effectiveness of the assessment centre method in comparison with other assessment methods.

This brings to conclusion the discussion regarding responses to the assessment centre method, where reactions from various parties were debated. The validity issue of the assessment centre method was also addressed by answering two vital questions: “Why do assessment
centres work?” and “Why do assessment centres fail?”. Thereafter, specific strategies on how to conduct assessment centres successfully, were attended to. This was followed by a detailed discussion on the utility of assessment centres, and a comparison between the assessment centre and other assessment procedures. Chapter 3 however, finalises the literature review for this research report.

As from Chapter 4, details on the research project will mainly be discussed, starting with a background study on the Business Development Manager (BDM), focusing on the structure, job profile, orientation and support, training and development, remuneration and recognition of the BDM. Thereafter, the selection process, hypotheses, research methodology, statistical analysis, conclusions on the study and recommendations will be attended to in the respective chapters.

As indicated in sub-point 1.5 (Scope of the study) on page 1-6 of Chapter 1, for the purpose of this research report, “the Company” will refer to this well-known company within the insurance industry, where the study was conducted.
CHAPTER 4

THE BUSINESS DEVELOPMENT MANAGER
4.1 INTRODUCTION

The rationale behind the position of Business Development Manager within this particular insurance company is to become more creative in order to generate business, add value and ensure organisational success.

The ability to convert ideas into business is an important requirement for a Business Development Manager. This will result in increased volumes, growth and market share, which is critical for the survival of the Company. A strong customer orientation in a high performance culture environment will further enhance positive financial results.

The structure, in which the Business Development Manager needs to function as a sales franchise manager within this particular insurance company, will be discussed in sub-point 4.2, followed by the job profile of the Business Development Manager in sub-point 4.3. Thereafter, orientation and support provided to the Business Development Manager, will be dealt with in sub-point 4.4, as well as the element of training and development, presented to the Business Development Manager. Finally, sub-point 4.6 will cover the aspect of remuneration and recognition, which is also important in the context of the Business Development Manager.

4.2 STRUCTURE

A Business Development Manager (BDM) is in charge of a business unit that must be economically viable and capable of functioning as such.

Hundred-and-sixteen business units are geographically located according to provincial boundaries. The six provinces or regions are Central Gauteng, North, Rand, Midlands, Coast and East Coast with a Provincial Manager responsible for each province. The Provincial Manager reports to the Sales Director. The BDM in turn, reports to a Provincial Manager, who contracts critical performance objectives with the BDM in accordance with the business plan of the business unit. The business plan describes how the marketing and growth objectives of
the business unit will be achieved, and gives details of the projected income and expenditure of the business unit for a specific year.

In order to achieve growth, a BDM may appoint a Development Manager, who reports directly to him/her. A business unit is established with a team of 15-20 Advisers, who must comply with minimum production norms, linked to a remuneration basis. Norms as prescribed by the Company with reference to contracting, procedures, training standards, disciplinary policy, and code of ethics and conduct also apply to Advisers in the business unit. The BDM of a business unit must focus on the appointment and orientation of new Advisers, as well as the development of current Advisers. In this process, new business opportunities must be identified and developed. A unit may also include in its ranks Independent Financial Advisers, who must comply with specific production norms as well (Information Book: Business Development Manager, 2000, pp b-1 – b-2).

The BDM is the first-line compliance officer in the sales business unit. In this capacity, the BDM must ensure compliance with reference to processes and procedures as determined by the Company’s policy, the insurance industry, legislation and the Common Law. According to the Information Book: Business Development Manager (2000, pp 0-1 – 0-2), which forms part of the BDM’s contract, the following guidelines must be adhered to:

- When appointing Advisers, the level of knowledge and skills of the candidate must be considered, as well as the Company’s policy in respect of insolvent individuals and those with a criminal record.
- Advisers must continuously be properly trained and accredited.
- The prescribed replacement process must be followed in all cases where a policy is replaced.
- The BDM must ensure that all complaints received from clients within the BDM’s area of responsibility, are reported and properly managed and investigated.
- Advice given by the Adviser to the clients, must be monitored by
the BDM on a random basis.

- Should disciplinary action be required against individuals within the BDM’s area of responsibility, such action must be instigated as soon as possible, and in accordance with the prescribed procedure.

As a manager, the BDM therefore, assumes accountability in respect of the business unit, and must in his/her aim to support the business objectives of the Company, take full responsibility for the following actions (Information Book: Business Development Manager, 2000, p b-3):

- Drawing up and implementing a business plan for the business unit.
- Growth in respect of targeted market share, manpower and volume of new business in terms of the business plan.
- Income and expenditure streams within the business unit, and to account for it.
- Ongoing quality training of and value-adding business support to Advisers.
- Compliance with the Company’s business standards and prescribed work practices in respect of the business unit.
- Entering into contracts on behalf of the Company for the purchasing and obtaining of goods and services for the unit, subject to the Company’s operational policy, procedures and rules.

It is essential for the management, functioning and administration of an organisation that information is protected effectively against unauthorised access, that integrity is guaranteed and, should the system be damaged, it is repaired promptly in order for the business to continue with the minimum of disruption. Therefore, it is imperative for the BDM to ensure that Advisers’ and clients’ interests are protected against unauthorised access by other parties. The BDM must always be aware of shortcomings in the computer information security system and, if necessary, make recommendations regarding additional control measures to senior management.
The BDM’s conduct towards the communication media, for example, the press and the public in general, is of particular importance to the Company. The BDM must act with circumspection in this regard. He/she may not make any statements or provide comments to the communication media, except in respect of local events where competition results are communicated. The corporate identity of the Company must also be adhered to in order to ensure uniformity.

It is clear that the BDM needs to function within certain guidelines and policies as prescribed by the Company, as well as legislative boundaries. More details on the job profile of a BDM will be discussed in sub-point 4.3.

4.3 JOB PROFILE

The main purpose of the BDM is to manage, develop and maintain a sales franchise. In order to achieve this business objective, the BDM needs to comply with specific job requirements. The ideal candidate must hold a B.Comm or other financial degree, and must have at least three years experience in the field of new business development.

The job profile of the BDM will be discussed with emphasis on the following elements:

- Context.
- Customers.
- Outputs.
- Competencies.

4.3.1 Context

From a profile point of view, the BDM needs to function within the following environmental limitations (Information Book: Business Development Manager, 2000, Annexure P1):

- An environment where a manager must take full responsibility for the success of his/her business.
- An environment where competition is fierce, and constant proactive development of the client base and sales force, is imperative for success.
- A profit driven environment where the manager has to accept full control over and take final accountability for the financial management of his/her business and its ultimate survival.
- An environment where efficient use of technology, will determine the competitive edge.

4.3.2 Customers

The customers of the BDM include external clients, sales management staff and Advisers.

4.3.3 Outputs

According to the Information Book: Business Development Manager (2000, Annexure P1), the BDM needs to deliver the following outputs:

- Business forecasts.
- Sales forecasts.
- Sales targets by area, region and channel.
- Marketing or sales strategy.
- Defining and establishing sales channels.
- Market strategy.
- Brand awareness.
- Product marketing project plan.
- Product launches.
- Promotion plans.
- Customer needs assessment.
- Acquisition of customer lists.
- Customer communications.
- Customer presentations.
- Customer feedback surveys.
- Complaint resolution.
- Strategies for customer acquisition and retention.
- Competitive analysis.
- Competitive intelligence analysis.
- Competitive response strategy.
- Territory plan.
- Financial forecasts and plans.
- Business unit financial reports.
- Budget for business unit.
- Legal advice regarding compliance.
- People practices.
- Recruit and vest Advisers.

4.3.4 Competencies

A job profile usually determines which competencies are required for a specific position. Accordingly, relevant evaluation instruments need to be selected and applied, in order to assess the competencies identified.

The following competencies per competence set were identified for the position of BDM, with the assistance of an external consultant (Information Book: Business Development Manager, 2000, Annexure P1):

4.3.4.1 Psychomotor competence set
- Leadership skills.
- Coaching skills.
- Business strategy skills.
- Financial management skills.
- Business operation skills.
- Performance management skills.

4.3.4.2 Behavioural competence set
- Entrepreneurship.
- Action orientation.
- Decisiveness and judgement.
- Assertiveness.
- Adaptability.
- Self-motivation.
- Energy.

4.3.4.3 Cognitive competence set
- Business operation knowledge.
- Financial management knowledge.
- Competitor knowledge.
- Industry knowledge.
- Change management knowledge.
- Conflict management knowledge.
- Sales management knowledge.

Orientation and support that the Company is providing to the BDM, will be discussed in sub-point 4.4.

4.4 ORIENTATION AND SUPPORT

All newly appointed BDMs, need to complete an introductory programme on key processes in the business development unit, during the first year of their term of office. These key processes include the following aspects (Information Book: Business Development Manager, 2000, p p-7):

- Business plan formulation.
- Recruiting, assessment and networking.
- Coaching, feedback and performance management.
- Worksite management.
- Market management.
- Customer relationship management.
- Budget and financials.

The sales training department has changed their approach of presenting a course for each development need. The format for a key process module, is one of the following:
- Work through reference and guidance material.
- Tasks or assignments.
- The opportunity to join a discussion group lead by a competent authority.
- Follow-up reporting.

One of the first tasks to be expected of the new BDM, is compiling a business plan for the new unit. Training resources are available to assist in this regard. The objective is that business unit plans must conform to the expectations of management criteria, and be aligned with one another and with the overall business plan of the sales business unit.

The next area of priority is to assist the BDM in building and guarding a customer base, followed closely by strategies on how to promote sales (Information Book: Business Development Manager, 2000, pp-6). These two areas require new behaviours from the BDM and need to be addressed by the appropriate parties involved. However, in sub-point 4.5 (Training and Development,) these two areas or themes will be attended to.

Personalised training and development arises from the personal development profile of each BDM, and is co-ordinated in partnership with the Provincial Manager, the BDM himself/herself and the sales training department.

During the first year of existence of a business unit, the unit will be supported by centralised administration systems, as developed by the Company. Seventeen centralised administrative business centres are in place countrywide, to provide an administrative support function to the business unit. The administrative personnel are in the Company’s service and include the following support staff (Information Book: Business Development Manager, 2000, p c-1 – c-3):
- An Adviser Consultant, who provides a range of administrative and support services to approximately 15 Advisers in a specific business unit.
- A Sales Assistant, who is responsible for the administrative functions of between seven and 10 business units.
- Two Administrative Assistants, who are responsible for the day-to-day administrative tasks performed in the business unit.
- A Personal Assistant, who reports to the BDM.
- An Operations Manager with a line function ratio of 1:15 in respect of support staff, and who is responsible to control and manage the budget of the business unit.
- A Provincial Sales Support Manager with a ratio of 1:30, who provides administrative support to the Provincial Manager, and is responsible to control and manage the budget of the province.

According to the *Information Book: Business Development Manager* (2000, p c-1), the objectives of the centralised administrative business centres are as follows:

- To enhance effectiveness of administrative support to Advisers and BDM’s.
- To reduce costs from an organisational point of view.
- To provide a differentiated service to Advisers according to performance and need.
- To afford the BDM the opportunity to concentrate on growth in market share, volume of business and manpower.

The aspect of training and development of newly appointed BDMs, linked to the three competence sets as identified in the job profile (sub-point 4.3 on pages 4-6 and 4-7), will be discussed in sub-point 4.5.

**4.5 TRAINING AND DEVELOPMENT**

The main purpose of development is to achieve measurable improvement in knowledge and skills of the BDMs, given that their job-histories,
training backgrounds and levels of competence are diverse. This will enable BDMs to produce the required outputs, as well as providing a route for developing present managers and pre-training of potential managers, which is critical for succession planning. With a practical, interactive approach and the use of expertise and ability amongst colleagues, the end-result will be a group of thriving and prosperous BDMs. External resources can also be used where applicable.

After appointing the first group of BDMs in the Company, five main themes were identified by cross-linking two important components (Information Book: Business Development Manager, 2000, pp-3). The first component was the job profile as set out in sub-point 4.3, whilst the other component was the sales management process, as illustrated in Appendix H. These themes indicate different modules, addressing specific knowledge and skills as required. The five main themes are:

- Focusing on the business unit, including plans and goals.
- Recruiting, training and developing for growth.
- Promoting sales.
- Building and guarding the customer base.
- Establishing business leadership.

It is necessary to look at this stage, how the outputs of the BDM’s job profile, relate to the themes mentioned. However, some outputs are linked to more than one theme (Information Book: Business Development Manager, 2000, pp p-4 – p-5).

4.5.1 Plans and goals of the business unit

This theme relates to the following outputs:

- Business forecasts.
- Sales forecasts.
- Sales targets by area, region and channel.
- Marketing or sales strategy.
- Defining and establishing sales channels.
4.5.2 Recruit, train and develop for growth

This theme relates to the following outputs:

- People practices.
- Recruit and vest Advisers.

4.5.3 Promoting sales

This theme relates to the following outputs:

- Business forecasts.
- Sales forecasts.
- Sales targets by area, region and channel.
- Defining and establishing sales channels.
- Brand awareness.
- Product marketing project plan.
- Product launches.
- Promotion plans.
- Customer presentations.
- Strategies for customer acquisition and retention.
- Competitive analysis.
- Competitive intelligence analysis.
- Competitive response strategy.
- Territory plan.
- Financial forecasts and plans.
- Business unit financial reports.
- Legal advice regarding compliance.

4.5.4 Building and guarding the customer base

This theme relates to the following outputs:

- Product launches.
- Promotion plans.
- Customer needs assessment.
- Acquisition of customer lists.
- Customer communications.
- Customer presentations.
- Customer feedback surveys.
- Complaint resolution.
- Strategies for customer acquisition and retention.
- Legal advice regarding compliance.

4.5.5 Business leadership

This theme relates to aspects of business leadership, integrated throughout the job profile of the BDM, as well as competencies in the psychomotor and behavioural competence sets.

From an organisational point of view, in the training and development interventions as described, the principles of customer relationship management it endorses, are applied. Upon appointment of a BDM, the training department opens a record for him/her. The record is updated and consists of the following information (Information Book: Business Development Manager, 2000, pp p-6 – p-7):

- Biographical and contact details.
- Management occupational history.
- Management training history.
- Feedback from the BDM assessment process.
- Specific areas in which the BDM is an expert, willing and able to coach and develop others.
- Areas of competence that will be maintained and enhanced.
- Areas in which knowledge or skills need to be increased.
- All training interventions, for example, courses and seminars.
- Training and development plans as they are formulated.

If all the above-mentioned interventions are implemented, the results will be a well-defined set of key business processes and behaviours, which will move the Company closer to a franchise-orientated organisation. This will enhance growth that the business development units should achieve, and support the management succession-training programme of the Company.

When achieving these results, the necessary remuneration and recognition systems must be in place, to reward and motivate the BDM in maintaining a good business record in his/her specific unit. This aspect will be addressed in sub-point 4.6.

**4.6 REMUNERATION AND RECOGNITION**

According to the rules of the Company, the Score business indicator is an organisational performance outcome indicator that is used as an internal recognition system where intermediaries earn points, based on the volume of business they generated during a specific period, which is also in line with the income stream generated by a business unit. These Score points are calculated as a percentage of the premium amount of new business.

New business refers to the following types of products (*Information Book: Business Development Manager*, 2000, pp e-1 – e-2):

- New recurring retirement annuities.
- New recurring non-retirement annuities.
- New life single premiums.
- Life single premium continuations.
- Unit trust investments in equity funds.
- Unit trust investments in money market funds.
- Linked product investments.

The Score point of the BDM is the sum of the Score points of all the Advisers in his/her specific business unit, and forms the basis for the calculation of the BDM’s remuneration. The Score points are calculated over a calendar year from January to December. In the case of this research study, the Score points were calculated from January 2002 to December 2002. The higher the Score point, the higher the volume of business the specific unit produced for the year.

For the purpose of this research report, “Score” or “Score point” will refer to an organisational performance outcome indicator, used as an internal recognition system in this particular insurance company, whereas “score” refers to the result(s) obtained by a candidate, applying for a BDM position in the Company, who attends a managerial assessment centre as part of the selection process, which will be described in Chapter 5.

The rules of the Company also stipulate the Weighted point business indicator as another internal measurement system, where different elements of a BDM’s performance are measured and weighted, depending on the importance of that element. The Weighted point for 2002 (as was the case in this study) consisted of the following elements:

- Volume of new business (compulsory item with the highest weighting).
- Manpower of unit (optional item).
- Quality of new business (optional item).
- Productivity of Advisers (optional item).

Each element is calculated as follows, according to the rules of the Company:
The volume element is calculated as the actual new business volumes of the BDM’s unit, against the volume target for the unit.

The manpower element is calculated as the number of productive Advisers in the unit by the end of the year, as a percentage of the number of Advisers at the beginning of the year.

The quality element is calculated as the percentage retention of new recurring life premiums within the first year, against a set target of 90%.

The productivity element is calculated as the average number of policies written per Adviser per month, against a set target of 12 policies.

The Weighted point consists of the volume element and at least two of the other three elements. The choice and weights of these optional elements depend on individual circumstances. The higher the Weighted point, the better the performance of that business development unit against its target.

On termination of the BDM’s contract at the end of a calendar month, the BDM will forfeit any remuneration that may have been generated between the cut-off date and the end of that calendar month. However, the BDM will receive remuneration generated between the previous cut-off date and the inception date of his/her BDM contract (Information Book: Business Development Manager, 2000, p e-6).

Apart from these two central recognition systems, a broad-based recognition system for top performers, is also available in the Company. This is supported by a number of special initiatives nationally, aimed exclusively at increasing productivity and growth in the core production groups. These competitions are monitored centrally and feedback is provided to BDMs and their Advisers through normal feedback systems. It also gives stature to the performance of top BDMs and Advisers over a period of time (Information Book: Business Development Manager, 2000, Annexure D1).
4.7 SUMMARY

After focusing on the structure, profile, support, development and recognition of the BDM, the selection process that was followed in appointing BDMs to the Company, will be discussed in Chapter 5.
CHAPTER 5

THE SELECTION PROCESS
5.1 INTRODUCTION

Talent assessment is an important task in human resource management. Organisational success depends on the quality of talent selected to fill future managerial positions. Apart from this requirement, organisational performance also depends on the level of motivation demonstrated by employees. However, the talent assessment process influences other human resource management decisions such as selection, performance appraisal, motivation, and training.

This particular insurance company is currently in an economic situation, where the availability of merit pay, is minimised. Hence, opportunity for promotion becomes more important in terms of both prestige and remuneration than meritorious job performance. Recognition and potential for personal achievement resulting from promotion, may be more valuable than any other organisational reward.

It is necessary at this stage to get perspective, as discussed in sub-point 5.2, on best practice in applying large-scale assessments against the background of this research study where very large-scale assessments had been implemented in appointing BDMs to the Company. Thereafter, the vision and strategic intentions of the Company’s assessment centre division will be discussed in sub-point 5.3, followed by the selection process and strategy being implemented in appointing BDMs. Finally, the integration process of assessment data, feedback that was given to all relevant parties concerning assessment results, and support activities made available to all employees affected by the process of restructuring, will be discussed in sub-point 5.6, 5.7 and 5.8 respectively.

5.2 BEST PRACTICE IN LARGE-SCALE ASSESSMENTS

The recruitment and assessment arenas face constant challenges. One such challenge is the use of fair and valid assessment techniques in large-scale assessments.
Large-scale assessments are no different to smaller selection procedures. The basic guidelines remain the same, which include the following aspects (Kriek, 2003, p 3):

- Obtaining the best information possible on individuals to allow effective decisions when appointments are made.
- Gaining a clear understanding of inherent job requirements.
- Using appropriate tools for selection of candidates.

The impact that large-scale assessments may have is enormous. For example, any errors made, can be magnified as very serious problems. In this regard, considerable investment is required to handle the volume of applicants. Changes in the efficiency of the process can also have an impact on the validity of the assessment process. Furthermore, the process may be subject to scrutiny and attract controversy from external parties.

Kriek (2003, p 3) stated that the following key areas, require attention when large-scale assessments are to be implemented:

- Drafting and implementation of a policy for the different users of the process to ensure standardisation, and to provide guidance for special cases such as candidates with disabilities, illness prior or during assessment, and re-use of assessment data as well.
- Identifying major stakeholders and clarifying goals with them, as time, resource constraints and financial resources need to be considered.
- Conducting a detailed job analysis to determine essential and desirable skills, necessary for successful job performance.
- Designing the assessment process by using a multi-method approach, that provides additional information on all aspects of a candidate’s performance, against selected competencies.
- Using on-line recruitment and screening systems, and administering occupational assessment through electronic formats in order to speed up scoring and interpretation.
- Defining the ideal candidate and providing specific information on the position, in order to achieve a shorter recruitment turnaround time.

- Auditing the assessment process regularly to ensure that standards are maintained.

- Considering fairness and effectiveness from both a qualitative and quantitative perspective.

- Giving priority to safeguard individuals against misuse of information.

The vision and strategic intentions of the Company’s assessment centre division will now be attended to in sub-point 5.3, as this relates to the nine key areas listed above when large-scale assessments are conducted.

5.3 VISION AND STRATEGIC INTENTIONS OF THE ASSESSMENT CENTRE DIVISION

The vision of the Company is to be the leader in wealth creation by thinking ahead.

The recruitment and selection strategy contributes to the achievement of the Company’s vision, by attracting and selecting the required number of candidates with the appropriate competencies and values to be more productive, and to represent the Company effectively and efficiently.

The assessment centre division is therefore, committed to adhere to the following ethical code of conduct, as prescribed in the policy statement of the assessment centre division:

- To use assessment instruments in order to enhance information available for selection, development and training decisions, as an aid to organisational effectiveness.

- To be committed to the highest standards of practice in the use of assessment techniques for maximum benefit to the organisation and individuals, and to promote fairness and equality of opportunity for all.
To use assessment centre results to do research on predictability, and to create a better understanding of human functioning that relates to successful, satisfying and productive work.

During an assessment process, all candidates will be subjected to a consistent experience. Assessment centre methodology also strives to be fair, objective and valid in its predictions.

According to the policy statement of the Company’s assessment centre division, the following strategic intentions have been identified:

- Alignment to the value adding principle of the business strategy.
- Sound internalisation of business imperatives and assessment research.
- Confirmation of the assessment instruments’ internal, national and international application value.
- Focus on the predictability value of success in various business units and channels.
- Cost effectiveness and diversity of manpower structure within the assessment centre.
- Capitalisation on correlation research and development of success indicators.
- Assessment and prediction of ethical behaviour and client orientation in the business context.
- Innovative prediction validity studies with specific emphasis on product and market diversification and learning potential.
- Continuous integration and alignment with internal processes, particularly recruitment and development.
- Continuous internal and external communication of developments and predictability of success factors.
- Creative assessment designs for specific business needs.
- Monitoring of assessment practices, standards, guidelines and uniformity.
- Commitment to continual innovation, validation and design.
The selection process and strategy, followed in the Company when appointing BDMs, will be discussed in sub-point 5.4 and 5.5 respectively.

**5.4 THE SELECTION PROCESS**

From a historical point of view, the Company’s sales business unit expressed in October 2000 the need for a competency-based evaluation process, in order to restructure the advisers’ channel. A recruitment and selection strategy was compiled by the human resource consultant and discussed with key stakeholders, who approved this intervention.

After the business decision had been communicated by senior management and the consultation process finalised, 183 employees were given the opportunity to apply for 86 BDM positions nationally. These employees consisted of Regional Managers, Branch Managers and Assistant Branch Managers. All candidates applied on-line for the various positions by indicating their preferences towards a specific business unit, as well as giving an indication of the area where they would prefer to attend an assessment centre. The options were Pretoria, Bloemfontein, Durban and Bellville.

All applications were processed after the closing date and sorted according to the area of preference, where the candidate would prefer to attend an assessment centre. Each candidate was informed about the date, venue and other arrangements as far as parking and lunch was concerned. The assessors were also informed about the final arrangements of the assessment centre programme, which would run for one full day. Approximately 170 candidates were assessed over a period of three weeks at four different venues.

All assessment data was integrated and a report compiled for discussion with the stakeholders. Information concerning specific production standards with reference to growth in premium income, growth in volume and growth in manpower was also gathered for each candidate, and discussed, in conjunction with assessment ratings.
Decisions were taken with respect to final placements, whereafter the successful candidates were informed about the result of their application. The unsuccessful candidates were informed thereafter. Contractual details were finalised with the successful candidates with effect from 01 January 2001, while information on the next steps of the retrenchment process, was given to those candidates who were unsuccessful. Feedback on the assessment results was given voluntarily to each candidate, which applied for a BDM position during this project period.

Since June 2001, a number of black BDMs from the external market were also appointed to the Company on a national basis, due to further expansions in the black upcoming market. Some of the BDMs who were appointed internally, resigned, resulting in new appointments having had to be made from the external market to fill these positions. Save for a screening interview that was conducted by a panel, consisting of two senior managers and a human resource consultant, the same assessment process was followed for these BDM appointments. The total number of BDMs appointed by the end of December 2002, amounted to 116.

5.5 THE SELECTION STRATEGY

The relevant stakeholders approved a selection strategy for appointing BDMs to the sales business unit of the Company.

The Company decided that their human resource department will manage the assessment process, but would like to sub-contract a portion of the behavioural assessment component of the process with reference to a leaderless group discussion exercise, an in-basket and a coaching interview simulation. Two internal assessors dealt with the written case study free of charge. However, an external consulting vendor gave a quotation for the use of two psychologists over a period of 20 days, conducting these three simulation exercises mentioned. The rate was R6 600 per day per psychologist, which amounted to R264 000 plus R50 000 for test material used in the assessment programme. The
cost for the project amounted to R314 000, excluding conference facilities, flights and travelling expenses. An additional R200 per feedback session was also charged. See Table 5.1 (Appendix I) for a cost analysis on all project expenses, which amounted to R429 000.

Apart from the competency-based screening interview, 13 competencies had to be measured by four different types of assessment exercises, conducted by four assessors. The two internal assessors were responsible for administering and scoring the in-house written case study where two hours were allocated, while the two external assessors were involved in a four hour session with a group of six to eight candidates, handling a leaderless group discussion, in-basket and coaching interview simulation, which had been developed by the external consulting vendor. Two assessment sessions of six hours each per day (one in the morning from 08:00 to 14:00 and one in the afternoon from 14:00 to 20:00) were scheduled accordingly. See Table 5.2 (Appendix J) for an example of how such an assessment session was scheduled.

The human resource consultant compiled competency-based interview questions for the one-hour screening interview, covering the following dimensions:

- Information monitoring.
- Leadership.
- Developing organisational talent.
- Teamwork.
- Persuasiveness.
- Customer service orientation.

Background information on the qualifications and work experience of the candidate was also evaluated on a five-point scale, currently being used in the Company. The scales of measurement were as follows:

1 = Requires considerable development.
2 = In need of development.
3 = Adequate for the position.
4 = Much more than adequate.
5 = Exceeds by far the adequate level.

This five-point scale was also used in the other four simulation exercises, which will be discussed briefly, in order to compare assessment results between the various exercises conducted on each BDM candidate. Consistency is critical from a standardised point of view, against the background of data integration.

In the case study, the candidate was given material to read and was asked to supply a written business plan comprising of a proposed marketing plan, financial plan and a human resource strategy. After two hours, all notes and documents were collected and scored by the internal assessors.

The following competencies were assessed in the written case study:

- Business strategy skills.
- Business operation skills.
- Financial management skills.
- Performance management skills.
- Adaptability.

Details on behavioural indicators linked to these five competencies assessed in the written case study, are shown in Table 5.3 (Appendix K).

The leaderless group discussion was designed to assess the behaviour of the candidates in meetings, and how effective they might be when working in a team. It was required of the candidates to consider a number of issues and to table specific recommendations by stating exactly what course of action is necessary. During this discussion, the group had to agree on the most appropriate solution in each case by voting for each recommendation. Each group member was expected to play the role of chairperson for at least one of the issues that had been discussed. This exercise was scheduled to last for 45 minutes.
After an initial briefing, the candidates had 90 minutes to work on the contents of an in-basket exercise. The candidates had to present the action to be taken either on a memo or they could clip a note by using the stationery provided. For example, they had to write memos and letters, plan appointments and meetings, make decisions and request information.

In the coaching interview simulation, the candidates had to address a problem with a subordinate and manage the situation. The candidates had 15 minutes to discuss the situation with the subordinate and to take action.

The competencies that were assessed in the leaderless group discussion, in-basket and coaching interview simulation are indicated in the competency matrix. See Table 5.4 (Appendix L).

Details on behavioural indicators linked to the competencies assessed in these three simulation exercises, are shown in Table 5.5 (Appendix M).

In terms of the three competence sets as identified in the job profile (see sub-point 4.3.4.1 - 4.3.4.3 on pages 4-6 and 4-7 of Chapter 4), the above-mentioned competencies cover the psychomotor competence set and the behavioural competence set. However, the cognitive competence set is covered by relevant experience and exposure, required for the job as a BDM.

5.6 INTEGRATION OF ASSESSMENT DATA

A report was compiled by one of the internal assessors, who integrated all the assessment data from the various assessors, involved in the selection process.

In conjunction with the key stakeholders, the 13 dimensions assessed in the assessment centre, were rated in order of importance. However, a decision was taken that each dimension will have an equal weighting when calculating an average for the preliminary dimension ratings.
The reason for this was that weightings had not prior to the assessment process, been determined by statistical methods, such as multiple regression, where the relationship between the criterion scores and the predictor scores reveal the weights. Once these weights are determined, a formula can be used to combine the dimension ratings and predict success, as described on page 2-66 in Chapter 2, sub-point 2.12.3 (Alternative methods of data integration).

The order of importance for these 13 dimensions assessed in the assessment centre, was as follows:

1 = Entrepreneurship.
2 = Performance management skills.
3 = Leadership skills.
4 = Coaching skills.
5 = Business operation skills.
6 = Business strategy skills.
7 = Financial management skills.
8 = Action orientation.
9 = Judgement and decisiveness.
10 = Assertiveness.
11 = Adaptability.
12 = Self-motivation.
13 = Energy.

To confirm, for the purpose of assessment data integration, a five-point scale was used consistently throughout all the assessment exercises to evaluate each assessment dimension. This scale was interpreted as follows:

1 = “Significant development area”, where the candidate showed little or no behaviour of mastering the specific competency.
2 = “Development area”, where the candidate requires development and/or training to master this skill.
3 = “Adequate”, where the candidate showed adequate behaviour of mastering the competency.

4 = “More than adequate”, where the candidate showed more than adequate behaviour of mastering the competency, and can be regarded as a strong point.

5 = “Exceeds requirement”, where the candidate exceeds the requirement by far, and is one of the candidate’s very strong competencies.

These ratings were indicated on the assessment report for each candidate that attended the assessment centre. After taking all the preliminary dimension ratings of a particular candidate into account, an overall assessment rating was determined by adding up all of these preliminary ratings, and calculating an average assessment rating for each candidate. The scales of measurement for this overall assessment rating, were as follows:

NR = “Not recommended”, if the average assessment rating was a 1 or 2.
R = “Recommended”, if the average assessment rating was 3.
SR = “Strongly recommended”, if the average assessment rating was 4 or 5.

This report was discussed with the key stakeholders, together with information related to the performance rating and specific production standards of each candidate. A final decision was then made whether a particular candidate had the necessary skills and knowledge to become a successful BDM, and to offer him/her a contract accordingly.

The aspect of feedback to each candidate with reference to assessment results, was included in the selection process. A counselling and advisory service was also offered to affected employees. These two aspects will briefly be discussed in sub-point 5.7 and 5.8.
5.7 FEEDBACK ON ASSESSMENT RESULTS

Within a month after the BDM appointments had been finalised, the two internal assessors started with feedback sessions on a voluntarily basis in the various regions. Feedback was given on each candidate’s performance in the managerial assessment centre.

Feedback consisted of a verbal review of the findings and a recommendation regarding appointment as a BDM, as well as possible promotability in the future. At the end of this discussion, the candidate received a brief written report of the assessment results, containing a competency profile. A more detailed report of each successful candidate’s assessment was presented to the Provincial Manager, who the particular BDM reported to. This report was used by the Provincial Manager to draw up a personal development plan for each BDM in his/her team, and to ensure that the required interventions take place.

A summary of the strengths and developmental areas of all the candidates, who had been assessed for the BDM positions, was given to the key stakeholders. This detailed analysis was made available to the training department in order to put forward proposals on how to address these developmental areas, both individually and in a group context.

The human resource consultant also conducted follow-up placement interviews after every three months, up to one year with appointed BDMs, as well as with the relevant Provincial Manager. The following aspects were discussed:

- Expectations from the Provincial Manager and newly appointed BDM.
- General planning for the BDM.
- Specific responsibilities, goals and targets of the BDM.
- Development and performance plan for the BDM.
- Relationship building between the Provincial Manager and BDM.
- Feedback on progress with regards to the above-mentioned.
5.8 SUPPORT ACTIVITIES

An independent counselling and advisory service was made available to all employees in the sales business unit, affected by the process of restructuring. A 24-hour toll free number was used for advice and counselling purposes.

The focus was on the ability of the retrenched employee to deal with change, forming a clear sense of what he/she can and prefer doing, establishing what he/she really want, and improving his/her job-hunting skills. Other objectives were the following:

- Take stock of where the employee is at that stage, by testing his/her current career against a framework of critical elements.
- Gain insight into the person’s own career preferences.
- Define the person’s own competencies and competency gaps, as well as his/her own transferable skills.
- Put a marketing plan together and start with the selling process.
- Learn how to do pro-active job-hunting, within or outside the organisation.
- Put career plans to the test by developing action plans that clarifies the person’s motives, and identify obstacles hindering the achievement of goals as identified.
- Get feedback on the clarity of career goals, and how to achieve it.

The purpose of the counselling service was also to assist those employees who were left behind, and to give them perspective on what they might have been experiencing at that time. Feelings and emotions were addressed and a re-energising programme was launched in the Company.

5.9 SUMMARY

This brings to conclusion the discussion regarding the selection process and strategy that was implemented in the Company, how assessment data was integrated and discussed with stakeholders, feedback given to
candidates applying for the various BDM positions nationally, and support activities made available to affected employees.

The various hypotheses specified in this research study, will be attended to in Chapter 6, before discussing the research methodology.
CHAPTER 6

HYPOTHESES
6.1 INTRODUCTION

The purpose of this research study is to establish the predictive validity of a managerial assessment centre for Business Development Managers, appointed to a particular insurance company.

Predictive validity is an important factor, determining the accuracy and quality of personnel decisions. Assessments can adequately identify behaviour required for success, when predicting the validity of assessment instruments. Furthermore, it provides more insight into the functioning of successful managers, and clearly indicates behaviour and skills needed to contribute to the profitability of an organisation.

This also relates to the Employment Equity Act within the South African context, clearly stating that psychometric tests and other similar employee assessments are prohibited, unless the test or assessment used is scientifically valid, can be applied equitably to all employees, and is unbiased. The Labour Relations Act (LRA), National Qualifications Framework (NQF) and Skills Development Act (SDA) also have significant implications with reference to the manner, in which assessments are conducted.

It is necessary to evaluate a few related definitions with respect to the concept of hypothesis, before discussing specific hypotheses specified in this research study.

6.2 DEFINITIONS

A hypothesis is a statement of specific expectations about the nature of things, derived from a theory. It is a statement of something that ought to be observed in the real world, if the theory is correct (Babbie, 1992, p 111, G4).

Babbie (1992, p 55) is also of the opinion that a theory is a systematic explanation for the observed facts and laws, that relate to a particular aspect of life, for example, juvenile delinquency.
However, Turner (1974, p 3) has examined several elements of theory. Concepts, variables and statements as defined by Turner, are three of those elements, which will be looked at briefly.

Concepts are the basic building blocks of theory and are abstract elements, representing classes of phenomena within the field of study. The concepts relevant to a theory of juvenile delinquency, for example, would include “juvenile” and “delinquency” for starters. “Peer group”, “social class” and “ethnicity” would also be relevant concepts, as well as “school performance”.

A variable is a concept’s empirical counterpart. Where concepts are in the domain of theory, variables are a matter of observation and measurement. Variables require more specificity than concepts. For example, as a variable, income might be specified as annual family income, as reported in response to a survey question.

Theory however, is based on several types of statements. Principles or laws are one type. Axioms are fundamental assertions on which theory is based. Propositions are conclusions drawn on relationships among concepts, which is based on logical interrelationships among axioms. Hypotheses therefore, are specified expectations about empirical reality, derived from propositions.

Babbie (1992, p 111, G4) added that the determination of whether these expectations that a hypothesis represents are, indeed, found to exist in the real world, is known as hypothesis testing. This aspect will further be attended to towards the end of Chapter 8, where the research hypotheses listed in sub-point 6.3, will be tested.

6.3 RESEARCH HYPOTHESES

Based on the theoretical perspectives and previous empirical research as discussed in Chapters 2 and 3, the following hypotheses have been developed:
- **Ho1** = The assessment centre results will correlate with the performance results of the BDMs.
- **Ho2** = The performance results of the BDMs will correlate with the competencies as identified in the job profile.
- **Ho3** = The assessment centre results will predict good performance and success in the work environment, in which the BDM is operating.
- **Ho4** = The assessment centre as an evaluation instrument, is having an impact on the selection process of the BDM.

However, the following alternative hypotheses have also been specified:

- **Ho5** = The performance results of the BDMs will correlate with the element of race without prejudice.
- **Ho6** = There is no comparison between assessment centre results and the results of other managerial evaluation instruments, for example a competency-based panel interview.
- **Ho7** = The assessment centre results of candidates not assessed but appointed, clearly indicate that the candidate is not recommended for appointment.
- **Ho8** = Senior management does not use assessment centre results when appointments are made.

### 6.4 SUMMARY

Against the background of the variety of hypotheses specified in this research study, the focus in Chapter 7 will be on the methodology of the research project, discussing the research strategy, data collection, statistical analysis and computations, limitations and key assumptions of the study.
CHAPTER 7

RESEARCH METHODOLOGY
7.1 INTRODUCTION

The emphasis in this chapter will be on the research methodology of the study. The research strategy applied in this study is a combination of two methods, which is field-study and observation with controlled stimulus. These two methods will be discussed briefly in sub-point 7.2. Thereafter, the process of data collection will be described, followed by a summary of four different statistical techniques, used to analyse data. In sub-point 7.5, several limiting factors will be considered against the background of the study, as well as key assumptions made during the research in sub-point 7.6.

As in the case of this research study, where the predictive validity of a managerial assessment battery needs to be established, certain factors determine the success of predictive validity studies (Cascio, 1991). These factors, which are key issues to be taken into account within the context of research methodology, are the following:

- Sample size.
- Variance in predictor scores (assessment centre results in this case) and criterion scores (performance results in this case).
- Validity of criterion scores.

The sample size should be large enough to ensure relatively consistent results in consecutive studies on different samples from the same population. A sample of approximately 100 respondents per sub-group is usually considered acceptable.

The effectiveness of predictive validity studies also depends on the variance in predictor scores and criterion scores. Score variance on the predictor and criterion measures are related to the level of discrimination, which can be expected between individuals in terms of “what” is measured.

It is important that performance evaluations are an accurate representation of work-related behaviour in terms of the core
competencies, required for a specific job.

The following factors determine the validity of criterion scores:

- Effectiveness in distinguishing between individuals in terms of performance levels.
- Level of judgemental bias in ratings, which include halo-affect, central tendency, leniency and knowledge of predictor scores.
- Level of criterion reliability.

The research strategy applied in this study, will now briefly be discussed in sub-point 7.2.

### 7.2 RESEARCH STRATEGY

A combination of two methods was applied in this research. These two methods were field-study and observation with controlled stimulus.

#### 7.2.1 Field-study

According to De la Rey (1978, p 14), a field-study is a scientific survey in retrospect. This significant phenomenon under scrutiny has already occurred. At a convenient moment, the researcher finds himself/herself in the field or natural environment, where the phenomenon is present and gathers relevant information. The researcher does not induce this phenomenon, and has almost no control over the dependent and independent variables. Variables are mainly psychometrically and statistically controlled. The correlation method can be used to process data that was obtained during field studies. Hence, the relationships among variables can be determined, and variance and covariance analysis be performed.

With reference to this research study, sufficient information from the Provincial Managers was gathered, upon which the performance results of each BDM were analysed and compared to the assessment results, obtained during the assessment centre. The assessment centre and behavioural performance scores were seen as independent variables,
whilst the Score point, Weighted point and composite behavioural scores were classified as dependent variables in this study. The means of the behavioural performance scores or ratings were calculated, and are referred to as “composite behavioural scores”, which gives an indication of performance achieved by this group of BDMs.

Correlation coefficients were also calculated, which provided information on the strength of the relationships between two sets of variables. Multiple regression analysis was performed in this case as well, in order to obtain information regarding the relationship between multiple independent variables and single dependent variables.

7.2.2 Observation with controlled stimulus

Such controlled stimulus comprises mainly of the gathering of information with the aid of psychological tests, instruments and interviews (De la Rey, 1978, p 15). Control over variables is acquired through standardisation. Standardisation is accomplished by applying uniformity to methods and techniques. This also includes evaluating measurements, which had been gathered, according to a specific criterion. The phenomenon as such, is not controlled, but that of the method according to which it is evaluated.

In this case, the assessment centre was used to gain behaviour-related information from each candidate, considered for a position as BDM. Performance-related information was also gathered for the purpose of this study. Each Provincial Manager was requested to assess the performance of the respective BDMs reporting to him/her. This evaluation was based on several behavioural competencies as demonstrated by the BDM in his/her work environment.

As far as standardisation is concerned, a five-point rating scale was used consistently in both these evaluation processes. Results obtained from the assessment centre and performance evaluation were integrated, whereafter an assessment report was compiled. However, against the background of these results, specific production-related information for
each potential BDM was also considered, pending a final decision whether a particular candidate had the necessary skills and knowledge to become a successful BDM.

The process that was followed, in order to collect all relevant data for the purpose of this research study, will be described in sub-point 7.3.

7.3 DATA COLLECTION

The sample for this research study consisted of a convenience sample of 92 managers, who participated in an assessment centre evaluation for managerial competencies, during the period 2000 to 2002.

Assessment centre ratings were measured against three different variables. The first variable was a business indicator known as Score point, calculated for each BDM as on 31 December 2002. Another business indicator known as Weighted point, was also calculated for each BDM as on 31 December 2002. Performance ratings conducted in November 2002 by each Provincial Manager, evaluating his/her team of BDMs respectively, was the third variable.

See Chapter 4, sub-point 4.6 (Remuneration and Recognition) on page 4-13, for an explanation on Score point and Weighted point. Both these business indicators have been seen as the criterion in this research study.

Each of the five Provincial Managers was requested to assess the performance of the respective BDMs reporting to him/her. This evaluation was based on several behavioural competencies as demonstrated by the BDM in his/her work environment. For the purpose of the study, behavioural performance was seen as the criterion. Each of the competencies was assessed as a separate dimension of the BDM’s work performance. These 13 competencies were the same 13 dimensions measured in the managerial assessment centre, conducted during the selection process. However, the assessment centre results were seen as the predictor for the purpose of this study.
A five-point rating scale was also used (as in the case of the assessment centre) by the Provincial Managers to electronically, complete a performance evaluation for each BDM. Certain changes were made to an internal computer programme known as Perception, to assist the Provincial Managers in completing the questionnaires. Appendix O-1 shows an example of the original questionnaire template, before being converted, whilst Appendix O-2 gives an overview of the questionnaire in the Perception format. Background information was sent to the Provincial Managers explaining the purpose of the evaluation, and instructing them how to access the computer programme and to complete the questionnaires. See Appendix N for an example of correspondence sent to the Provincial Managers.

Biographical and other company-related information was collected for each BDM and captured onto a spreadsheet, together with assessment centre data and performance data. The following additional information was gathered for each BDM:

- Organisational business code.
- Region.
- Business unit.
- Market focus.
- Appointment date as BDM.
- Age.
- Race.
- Gender.
- Qualification.

The organisational business code was only captured for identification purposes with reference to the Score point or Weighted point of a specific BDM.

All the BDMs were classified into one of four groups, depending on the market focus of that specific business unit. BDMs should preferably, only be compared to others within the same group.
The four groups are as follows:

- **Group 1**: Most clients are in the self-employed or professional market in urban areas.
- **Group 2**: Most clients are in the salaried or employed market in urban areas.
- **Group 3**: Most clients are in rural areas.
- **Group 4**: Most clients are from the emerging black market in either urban or rural areas.

Against the background of all this research information, the data was sent to an independent third party to conduct a statistical analysis.

### 7.4 STATISTICAL ANALYSIS AND COMPUTATIONS

The data was screened and analysed using the following statistical techniques:

- Descriptive statistics.
- Correlation coefficients.
- Factor analysis.
- Multiple regression analysis.

Descriptive statistics were presented graphically in this research report where appropriate. However, the means of the behavioural performance scores or ratings were calculated, and are referred to as "composite behavioural scores", which gives an indication of performance achieved by this group of BDMs. The data was also analysed systematically to establish whether there were significant relationships.

The application value of the statistical analysis will now be discussed.

#### 7.4.1 Descriptive statistics

The Blox-test was used to screen the data for outliers. Frequency statistics were calculated to determine group sizes and the characteristics of the research group. The mean, standard deviations, skewness and
Kurtosis coefficients were calculated in order to obtain information on the distribution of scores for the various measurements. Information on the variability of scores can also be obtained by means of descriptive statistics (De la Rey, 1978, pp 66-68).

### 7.4.2 Correlation coefficients

Correlation coefficients provide information on the strength of the relationships between two sets of variables (De la Rey, 1978, p 73). A correlation coefficient ranges from 0 to 1, where the value 0 indicates no predictive validity. The value 1, however, indicates perfect predictive validity. Due to the fact that human behaviour is very complex, and an accurate measurement thereof extremely difficult to determine, a value of 0.5 is generally considered as very good.

### 7.4.3 Factor analysis

Factor analysis provides a way to determine the dimensionality of data by means of inspecting relevant factor structures (De la Rey, 1978, p 83). However, within an assessment centre context, factor analysis can also address the question of whether or not the actual structure of across-exercise dimension ratings, matches the structure of these dimensions, as it was intended by the assessment centre designers (Thornton, 1992, p 158).

### 7.4.4 Multiple regression analysis

According to De la Rey (1978, p 77), multiple regression analysis provides a way to determine the highest correlation coefficient that can be obtained from a given set of measures (assessment centre results as predictor in this case), as each measure is allocated an optimum weight for predicting the criterion (work performance ratings or scores as criterion in this case). Statistically, the relationship between the criterion scores and the predictor scores reveals the weights in order to predict success within the context of this study. A ratio of approximately one variable to 10 cases was used in the analysis, in order to ensure stability and accuracy of the results.
However, there were limitations in this research study that will be discussed in sub-point 7.5.

7.5 LIMITATIONS

Several limiting factors need to be considered against the background of this research study.

As mentioned earlier in this chapter, a sample of approximately 100 respondents per sub-group is usually acceptable. In this case, only 92 BDMs participated in this research project. However, the total number of BDMs appointed to the Company by the end of December 2002, amounted to 116. This difference in numbers is due to the fact that specific information, for example, assessment centre results and performance-related information with reference to certain BDMs, was not available when the process of data collection was concluded.

It seems that in this study, there is an indication that behavioural performance is strongly related to organisational outcomes. The extent, to which the Provincial Managers were biased in the performance ratings given for each BDM, is not clear and is difficult to determine. Provincial Managers should be sensitised to the limiting effect of bias and be careful not to over-rate BDMs, only because of a high Score point or of their likeable personalities. This relates to the halo-effect within the context of performance evaluation.

No correlation coefficient could be determined between the appointment dates and behavioural performance ratings of the BDMs, because the sample size in the study was too small. This could have given an indication of the period of time in which the newly appointed BDM will be capable of achieving results and be successful in his/her job.

The frequency analysis also revealed that the sub-groups for market focus were too small to justify a separate correlation analysis.
The following aspects could also be considered as limiting factors, and may have had an effect on the correlations obtained:

- The effect of central tendency and/or the selection ratio appears to limit the score variance of the assessment centre, which jeopardises the discrimination value of the Provincial Managers’ rating of behavioural performance.

- The use of a seven-point rating scale instead of a five-point rating scale could be considered, in order to provide more scope for score variation, and consequently, result in better discrimination of performance levels.

- The high inter-correlation between the behavioural performance dimensions, and the high correlation between the composite behavioural performance indicator and Score point, may imply rating bias in terms of the halo-effect.

- The Weighted point was characterised by a large number of extreme scores, where the distribution deviated significantly from the normal distribution, therefore, the data had a less optimal distribution for the purpose of analysis.

Certain assumptions were also made during the research, which will be mentioned in sub-point 7.6.

7.6 KEY ASSUMPTIONS

One assumption is that the sample of BDMs that was selected, will fairly represent the population of BDMs that were appointed to the Company.

Another assumption is that the Provincial Managers will be willing to complete the performance questionnaires honestly and openly, as this could have an effect on the validity of the research.

As far as the assessment centre results and performance ratings are concerned, it is assumed that the statistical analysis performed on the data could be treated as interval data, and statistical techniques, such as analysis of variance, are therefore applicable.
It is also generally believed that the five-point scale used in coding the data, is not necessarily an interval scale. The gap between “requires considerable development” and “in need of development” is assumed to be the same as the gap between “much more than adequate” and “exceeds by far the adequate level”. This assumption is, however, well recognised in social science research and provides a useful method for determining trends in data of this type. In all statistical tests of significance, a 95% confidence level was applied.

7.7 SUMMARY

This brings to conclusion the discussion regarding the method of research, processes that were followed to collect and analyse data, limiting factors in the study and key assumptions. The research results will be discussed in Chapter 8.
CHAPTER 8

RESEARCH RESULTS
8.1 INTRODUCTION

Chapter 8 will focus on an analysis and interpretation of the results of this study. Research results obtained, will be discussed in sub-point 8.2 according to various statistical techniques applied in the study, which include descriptive statistics, correlation coefficients, factor analysis, and multiple regression analysis.

Sample characteristics, as well as characteristics of the assessment and performance scores, will be attended to in sub-point 8.2.1 as far as descriptive statistics are concerned. The results of the correlation analysis will be discussed in sub-point 8.2.2, followed by a factor analysis in sub-point 8.2.3 as performed on the assessment centre, as well as the behavioural performance variables. A multiple regression analysis, indicating the relationship between multiple independent variables and single dependent variables related to this study, will be discussed in sub-point 8.2.4.

A summary of the main findings will be given in sub-point 8.3 and hypotheses as discussed in Chapter 6, will be tested. Finally, results of previous research on assessment centres will be reviewed in sub-point 8.4.

8.2 RESULTS AND DISCUSSION

8.2.1 Descriptive statistics

Sample characteristics, as well as characteristics of the assessment and performance scores, will be discussed in this sub-point.

8.2.1.1 Sample characteristics

Details on the characteristics of the sample are set out in Table 8.1 on page 8-3.
RESEARCH RESULTS

(i) Region

The Coastal region (33%) was the best represented sub-group in the sample. The remaining percentage (67%) of cases was more or less equally distributed amongst Rand, East Coast, North, Midlands and Central Gauteng.

(ii) Race

The white group constituted 85% of the sample, followed by the black group at 12%. The coloured and Indian groups were least represented, at 2% and 1% respectively.

(iii) Gender

Male BDMs, representing 97% of the sample, dominated the sample.

(iv) Appointment date

The majority of BDMs (85%) were appointed on 1 January 2001.

(v) Market focus

The rural market group (32%) was the best represented sub-group in the sample, followed by the self-employed group (28%), the salaried group (24%) and the emerging market group (16%).

(vi) Age

The age of the sample group ranged between 37 and 62 years. The average age of a BDM was 46 years.
Table 8.1: Sample Characteristics

<table>
<thead>
<tr>
<th>REGION</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Gauteng</td>
<td>8.00</td>
<td>8.70</td>
<td>8.70</td>
</tr>
<tr>
<td>Coast</td>
<td>30.00</td>
<td>32.61</td>
<td>41.30</td>
</tr>
<tr>
<td>East Coast</td>
<td>13.00</td>
<td>14.13</td>
<td>55.43</td>
</tr>
<tr>
<td>Midlands</td>
<td>11.00</td>
<td>11.96</td>
<td>67.39</td>
</tr>
<tr>
<td>North</td>
<td>12.00</td>
<td>13.04</td>
<td>80.43</td>
</tr>
<tr>
<td>Rand</td>
<td>18.00</td>
<td>19.57</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>92.00</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RACE</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>11.00</td>
<td>11.96</td>
<td>11.96</td>
</tr>
<tr>
<td>Coloured</td>
<td>2.00</td>
<td>2.17</td>
<td>14.13</td>
</tr>
<tr>
<td>Indian</td>
<td>1.00</td>
<td>1.09</td>
<td>15.22</td>
</tr>
<tr>
<td>White</td>
<td>78.00</td>
<td>84.78</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>92.00</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENDER</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>3.00</td>
<td>3.26</td>
<td>3.26</td>
</tr>
<tr>
<td>Male</td>
<td>89.00</td>
<td>96.74</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>92.00</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPOINTMENT DATE</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001/01/01</td>
<td>78.00</td>
<td>84.78</td>
<td>84.78</td>
</tr>
<tr>
<td>2001/01/05</td>
<td>2.00</td>
<td>2.17</td>
<td>86.96</td>
</tr>
<tr>
<td>2001/01/06</td>
<td>4.00</td>
<td>4.35</td>
<td>91.30</td>
</tr>
<tr>
<td>2001/01/08</td>
<td>1.00</td>
<td>1.09</td>
<td>92.39</td>
</tr>
<tr>
<td>2001/01/09</td>
<td>3.00</td>
<td>3.26</td>
<td>95.65</td>
</tr>
<tr>
<td>2001/01/10</td>
<td>1.00</td>
<td>1.09</td>
<td>96.74</td>
</tr>
<tr>
<td>2001/01/11</td>
<td>1.00</td>
<td>1.09</td>
<td>97.83</td>
</tr>
<tr>
<td>2002/01/01</td>
<td>1.00</td>
<td>1.09</td>
<td>98.91</td>
</tr>
<tr>
<td>2002/01/02</td>
<td>1.00</td>
<td>1.09</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>92.00</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MARKET FOCUS</th>
<th>Frequency</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging market</td>
<td>15.00</td>
<td>16.30</td>
<td>16.30</td>
</tr>
<tr>
<td>Rural area</td>
<td>29.00</td>
<td>31.52</td>
<td>47.83</td>
</tr>
<tr>
<td>Salaried</td>
<td>22.00</td>
<td>23.91</td>
<td>71.74</td>
</tr>
<tr>
<td>Self-employed</td>
<td>26.00</td>
<td>28.26</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>92.00</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37.00</td>
<td>62.00</td>
<td>46.12</td>
<td>4.96</td>
</tr>
</tbody>
</table>
8.2.1.2 Descriptive statistics for assessment centre and performance variables

The descriptive statistics for the assessment centre and performance variables (composite behavioural score) are set out in Figure 8.1 on pages 8-5 and 8-6.

The following observations were made:

(i) Assessment centre scores

The mean assessment centre scores represented a close to normal distribution within a limited range of the five-point scale. The mean of the assessment centre scores was 3.020 with a standard deviation of 0.396.

After the assessment centre scores were rounded off to the nearest integer, the scale-midpoint (3) represented 78% of the scores. The scale values 2 and 4 followed with approximately 9% and 13% of the responses. Scale values 1 and 5 were not represented in the database. These results may indicate an over-reliance on the midpoint of the assessment centre scores, associated with a central tendency effect.

However, the reduced incidence of values 1 and 2 may be the result of a cut-off point and/or selection ratio, introduced in the selection of potential BDMs. The score variance of the assessment centre scores has also been limited, due to the effect of central tendency and/or the selection ratio that was introduced. The distribution of scores, which represent an ideal normal distribution on the five-point scale, is indicated in Table 8.2.

Table 8.2: Normal Distribution of Scores on a Five-point Scale

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>24%</td>
<td>38%</td>
<td>24%</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>
(ii) Composite behavioural scores

The composite behavioural scores, as well as the assessment centre scores, reflected a similar pattern. The scores represented a close to normal distribution, with a mean score of 2.945 and a standard deviation of 0.494.

After the values were rounded off to the nearest integer, the scale-midpoint (3) represented 71% of the scores. The scale values 2 and 4 followed with approximately 16% and 13% of the responses. Scale values 1 and 5 were largely neglected in the assessments. Although the distribution of scores was slightly better than the assessment centre scores, the results still indicate an over-reliance on the midpoint of the scale. The score variance and discrimination value of the performance assessment has been limited due to the effect of central tendency.

Figure 8.1: Descriptive Statistics for Assessment Centre and Performance Variables
(iii) Score point

The Score point represented a close to normal distribution, with a mean score of 1481.439 and a standard deviation of 768.481.

(iv) Weighted point

The Weighted point deviated significantly from a normal distribution, with a mean score of 86.501 and a standard deviation of 21.198.
8.2.2 Correlation coefficients

The results of the correlation analysis are set out in Table 8.3 on page 8-9.

The following observations were made:

- Statistically significant correlations were obtained between corresponding fields in respect of the assessment centre scores and the behavioural scores, as indicated by the shaded values on the diagonal for Judgement and Decisiveness (0.283), Business Operation Skills (0.240), Leadership Skills (0.210) and Action Orientation (0.203). A correlation of 0.200 was also obtained for both Self-motivation and Energy. The remaining corresponding fields did not correlate significantly.

- Statistically significant correlations were obtained between non-corresponding assessment centre scores and behavioural scores (see values not on the diagonal). The results suggest that the variables included in the assessment centre, relate significantly to multiple variables on the behavioural performance measure and vice versa. The results therefore, suggest a strong overlap between variables included in the different measures.

- Statistically significant correlations were obtained between assessment centre scores with reference to Entrepreneurship (0.276), Performance Management Skills (0.329), Leadership Skills (0.270), Business Operation Skills (0.254), Business Strategy Skills (0.236), Action Orientation (0.285), Judgement and Decisiveness (0.301), Self-motivation (0.350) and Energy (0.225), and performance in terms of the composite behavioural score (see the shaded horizontal line).

- Statistically significant correlations were obtained between assessment centre scores with reference to Leadership Skills
RESEARCH RESULTS

(0.221), Business Strategy Skills (0.218), Financial Management Skills (0.262), Action Orientation (0.344), and Judgement and Decisiveness (0.239), and performance in terms of the Score point (see the shaded horizontal line).

- Statistically significant correlations were also obtained between assessment centre scores with reference to Action Orientation (0.224), and Judgement and Decisiveness (0.232), and performance in terms of the Weighed point (see the shaded horizontal line).

- Statistically significant correlations were obtained between the behavioural scores with reference to Entrepreneurship (0.339), Performance Management Skills (0.341), Leadership Skills (0.252), Business Operation Skills (0.360), Business Strategy Skills (0.286), Financial Management Skills (0.424), Action Orientation (0.231), Self-motivation (0.412), Energy (0.232) and composite behavioural score (0.462), and performance in terms of the Score point (see the shaded vertical column).

- Statistically significant correlations were obtained between the behavioural scores with reference to Entrepreneurship (0.368), Performance Management Skills (0.499), Leadership Skills (0.351), Business Operation Skills (0.283), Business Strategy Skills (0.266), Financial Management Skills (0.421), Action Orientation (0.295), Judgement and Decisiveness (0.369), Assertiveness (0.242), Self-motivation (0.352), Energy (0.281), and composite behavioural score (0.454), and performance in terms of the Weighted point (see the shaded vertical column).

- A statistically significant correlation of 0.508 was obtained between the Score point and Weighted point. The Score point therefore, accounts for 25% (R Square) of the variance in the Weighted point.
Table 8.3: Pearson Inter-correlations of Assessment and Performance Scores

<table>
<thead>
<tr>
<th>BEHAVIOURAL SCORES</th>
<th>ASSESSMENT CENTRE SCORES</th>
<th>Score point</th>
<th>Weighted point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>0.15</td>
<td>0.155</td>
<td>0.220*</td>
</tr>
<tr>
<td>Performance Management</td>
<td>0.116</td>
<td>0.19</td>
<td>0.128</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>0.177</td>
<td>0.177</td>
<td>0.210*</td>
</tr>
<tr>
<td>Coaching Skills</td>
<td>0.159</td>
<td>0.275**</td>
<td>0.192</td>
</tr>
<tr>
<td>Business Operation Skills</td>
<td>0.230*</td>
<td>0.248*</td>
<td>0.210*</td>
</tr>
<tr>
<td>Business Strategy Skills</td>
<td>0.141</td>
<td>0.173</td>
<td>0.095</td>
</tr>
<tr>
<td>Financial Management Skills</td>
<td>0.306**</td>
<td>0.256*</td>
<td>0.124</td>
</tr>
<tr>
<td>Action Orientation</td>
<td>0.185</td>
<td>0.337**</td>
<td>0.224*</td>
</tr>
<tr>
<td>Judgement and Decision</td>
<td>0.250*</td>
<td>0.238*</td>
<td>0.356***</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>0.08</td>
<td>0.194</td>
<td>0.015</td>
</tr>
<tr>
<td>Adaptability</td>
<td>0.169</td>
<td>0.179</td>
<td>0.144</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>0.220*</td>
<td>0.261*</td>
<td>0.129</td>
</tr>
<tr>
<td>Energy</td>
<td>0.084</td>
<td>0.157</td>
<td>0.187</td>
</tr>
<tr>
<td>Composite behavioural score</td>
<td>0.276**</td>
<td>0.329**</td>
<td>0.270**</td>
</tr>
<tr>
<td>Score point</td>
<td>0.142</td>
<td>0.143</td>
<td>0.221*</td>
</tr>
<tr>
<td>Weighted point</td>
<td>0.171</td>
<td>0.071</td>
<td>0.157</td>
</tr>
</tbody>
</table>

* : p ≤ 0.05
** : p ≤ 0.01
8.2.3 Factor analysis

A factor analysis was performed on the assessment centre and behavioural performance variables to determine the dimensionality of these variables.

8.2.3.1 Assessment centre variables

The results of the factor analysis on the assessment centre variables are set out in Figure 8.2 on page 8-11.

The factor analysis suggested that the assessment centre variables consist of two distinct underlying components. The Scree-plot analysis clearly indicated two distinct underlying components that are called Component 1 and Component 2, which clearly deviated from the remaining components. The grouping of variables is set out in the pattern matrix.


The results of the factor analysis could be an indication of the construct validity of the assessment scales, provided that there is a logical explanation and justification for the grouping of variables. This is indeed the case as Component 1 represents the eight dimensions, which can broadly be defined as embedded entrepreneurial and leadership qualities, as assessed in the leaderless group discussion exercise, in-
RESEARCH RESULTS

basket and coaching interview simulation. Component 2 however, is representative of the five dimensions or essential qualities for effective day-to-day business management, as assessed in the written case study. The groupings therefore, are logical and justified.

Figure 8.2: Factor Analysis: Assessment Centre Variables

<table>
<thead>
<tr>
<th>Component Number</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>0.666</td>
<td>-0.039</td>
</tr>
<tr>
<td>Performance Management Skills</td>
<td>0.137</td>
<td>0.713</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>0.658</td>
<td>0.131</td>
</tr>
<tr>
<td>Coaching Skills</td>
<td>0.645</td>
<td>0.021</td>
</tr>
<tr>
<td>Business Operation Skills</td>
<td>-0.059</td>
<td>0.697</td>
</tr>
<tr>
<td>Business Strategy Skills</td>
<td>0.052</td>
<td>0.851</td>
</tr>
<tr>
<td>Financial Management Skills</td>
<td>0.027</td>
<td>0.671</td>
</tr>
<tr>
<td>Action Orientation</td>
<td>0.794</td>
<td>0.068</td>
</tr>
<tr>
<td>Judgement and Decisiveness</td>
<td>0.783</td>
<td>0.082</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>0.635</td>
<td>-0.052</td>
</tr>
<tr>
<td>Adaptability</td>
<td>-0.121</td>
<td>0.797</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>0.678</td>
<td>-0.002</td>
</tr>
<tr>
<td>Energy</td>
<td>0.728</td>
<td>-0.159</td>
</tr>
</tbody>
</table>

Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Total</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.116</td>
<td>31.664</td>
<td>31.664</td>
</tr>
<tr>
<td>2</td>
<td>2.727</td>
<td>20.974</td>
<td>52.637</td>
</tr>
<tr>
<td>3</td>
<td>1.046</td>
<td>8.045</td>
<td>60.683</td>
</tr>
<tr>
<td>4</td>
<td>0.860</td>
<td>6.615</td>
<td>67.298</td>
</tr>
<tr>
<td>5</td>
<td>0.822</td>
<td>6.321</td>
<td>73.619</td>
</tr>
<tr>
<td>6</td>
<td>0.665</td>
<td>5.116</td>
<td>78.735</td>
</tr>
<tr>
<td>7</td>
<td>0.592</td>
<td>4.556</td>
<td>83.292</td>
</tr>
<tr>
<td>8</td>
<td>0.488</td>
<td>3.752</td>
<td>87.044</td>
</tr>
<tr>
<td>9</td>
<td>0.452</td>
<td>3.480</td>
<td>90.524</td>
</tr>
<tr>
<td>10</td>
<td>0.362</td>
<td>2.788</td>
<td>93.312</td>
</tr>
<tr>
<td>11</td>
<td>0.326</td>
<td>2.506</td>
<td>95.820</td>
</tr>
<tr>
<td>12</td>
<td>0.316</td>
<td>2.430</td>
<td>98.251</td>
</tr>
<tr>
<td>13</td>
<td>0.227</td>
<td>1.749</td>
<td>100.000</td>
</tr>
</tbody>
</table>
8.2.3.2 Behavioural performance variables

The results of the factor analysis on the behavioural performance variables are set out in Figure 8.3 on page 8-13.

The factor analysis suggested that the behavioural performance variables consist of one dominant underlying component. The Scree-plot analysis clearly indicated one distinct underlying component that is called Component 1, which clearly deviates from the remaining components. The grouping of variables is set out in the component matrix.

Component 1 explained 42.460% of the total variance. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO-value) is acceptable. All the variables had high loadings on Component 1, except for Adaptability.

An alternative two-component solution representing the structure underlying the variables, is set out in the pattern matrix. With the exception of Coaching Skills, Performance Management Skills and Adaptability, the two-component solution strongly resembled the pattern matrix, obtained for the assessment variables.


The one-component solution clearly provided the better explanation of the two possible solutions. These results provide the rationale for calculating a composite score for the behavioural variables. Adaptability appears not to relate significantly to the variables that formed part of the composite score of behavioural performance.
Figure 8.3: Factor Analysis: Behavioural Performance Score

Pattern Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>0.665</td>
<td>0.217</td>
</tr>
<tr>
<td>Performance Management Skills</td>
<td>0.435</td>
<td>0.433</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>0.580</td>
<td>0.214</td>
</tr>
<tr>
<td>Coaching Skills</td>
<td>0.119</td>
<td>0.553</td>
</tr>
<tr>
<td>Business Operation Skills</td>
<td>-0.021</td>
<td>0.878</td>
</tr>
<tr>
<td>Business Strategy Skills</td>
<td>-0.050</td>
<td>0.783</td>
</tr>
<tr>
<td>Financial Management Skills</td>
<td>-0.042</td>
<td>0.762</td>
</tr>
<tr>
<td>Action Orientation</td>
<td>0.849</td>
<td>-0.067</td>
</tr>
<tr>
<td>Judgement and Decisiveness</td>
<td>0.572</td>
<td>0.215</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>0.484</td>
<td>0.247</td>
</tr>
<tr>
<td>Adaptability</td>
<td>0.102</td>
<td>0.139</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>0.775</td>
<td>-0.063</td>
</tr>
<tr>
<td>Energy</td>
<td>0.857</td>
<td>-0.190</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
Rotation Method: Oblimin with Kaiser Normalisation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.862

Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5.520</td>
<td>5.096</td>
</tr>
<tr>
<td>% of Variance</td>
<td>42.460</td>
<td>42.460</td>
</tr>
<tr>
<td>Cumulative</td>
<td>42.460</td>
<td>84.922</td>
</tr>
</tbody>
</table>

Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>0.786</td>
</tr>
<tr>
<td>Performance Management Skills</td>
<td>0.754</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>0.706</td>
</tr>
<tr>
<td>Coaching Skills</td>
<td>0.565</td>
</tr>
<tr>
<td>Business Operation Skills</td>
<td>0.706</td>
</tr>
<tr>
<td>Business Strategy Skills</td>
<td>0.601</td>
</tr>
<tr>
<td>Financial Management Skills</td>
<td>0.609</td>
</tr>
<tr>
<td>Action Orientation</td>
<td>0.719</td>
</tr>
<tr>
<td>Judgement and Decisiveness</td>
<td>0.699</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>0.646</td>
</tr>
<tr>
<td>Adaptability</td>
<td>0.208</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>0.654</td>
</tr>
<tr>
<td>Energy</td>
<td>0.625</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis

8.2.4 Multiple regression analysis

A multiple regression analysis was performed to obtain information regarding the relationship between multiple independent variables (in this case assessment centre and behavioural scores) and single dependent variables (in this case the Score point, Weighted point and composite behavioural score).
To ensure a ratio of 1:10 between variables and cases, only variables that correlated significantly in Table 8.3 on page 8-9, were included in the regression analysis.

The following results were obtained:

8.2.4.1 Assessment centre and Score point relationship

The results set out in Table 8.4, indicate a significant correlation (R = 0.414, Sig = 0.004) between the Score point as the dependent variable and Leadership Skills, Business Strategy Skills, Financial Management Skills and Action Orientation as the independent variables.

Action Orientation made the largest contribution (Beta = 0.289) in the prediction of the Score point, followed by Financial Management Skills (Beta = 0.188). Judgement and Decisiveness was excluded in the analysis due to a problem with collinearity. Collinearity normally appears as a problem when an independent variable, correlates substantially with two or more of the remaining independent variables.

Table 8.4: Regression Analysis: Assessment Centre and Score Point Relationship

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.171</td>
<td>0.130</td>
</tr>
<tr>
<td>R Square</td>
<td>0.171</td>
<td>0.130</td>
</tr>
<tr>
<td>Anova</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum of Squares</td>
<td>Regression</td>
<td>8585519.454</td>
</tr>
<tr>
<td></td>
<td>Df</td>
<td>4.000</td>
</tr>
<tr>
<td>Mean Square</td>
<td>2146379.863</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4.178</td>
<td></td>
</tr>
<tr>
<td>Sig</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>41612298.753</td>
<td></td>
</tr>
<tr>
<td>Mean Square</td>
<td>513732.083</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50197818.207</td>
<td>85.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-431.091</td>
<td>-0.866</td>
<td>0.389</td>
<td></td>
</tr>
</tbody>
</table>

| Assessment Centre | | |
| Leadership Skills | 57.307 | 136.428 | 0.049 | 0.420 | 0.676 |
| Business Strategy Skills | 52.452 | 125.006 | 0.053 | 0.420 | 0.676 |
| Financial Management Skills | 211.519 | 139.204 | 0.188 | 1.519 | 0.133 |
| Action Orientation | 302.121 | 120.053 | 0.289 | 2.517 | 0.014 |

| Performance criteria | Score point | | | | |


8.2.4.2 Assessment centre and Weighted point relationship

The results set out in Table 8.5, indicate a non-significant correlation (R = 0.251, Sig = 0.057) between the Weighted point as the dependent variable and Action Orientation, and Judgement and Decisiveness, as independent variables.

Table 8.5: Regression Analysis: Assessment Centre and Weighted point Relationship

<table>
<thead>
<tr>
<th>Model Summary</th>
<th></th>
<th>Adjusted</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>R Square</td>
<td>R Square</td>
<td>Std. Error</td>
</tr>
<tr>
<td>0.251</td>
<td>0.063</td>
<td>0.042</td>
<td>20.749</td>
</tr>
</tbody>
</table>

Anova

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2555.011</td>
<td>2.000</td>
<td>1277.505</td>
<td>2.967</td>
</tr>
<tr>
<td>Residual</td>
<td>37885.394</td>
<td>88.000</td>
<td>430.516</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40440.405</td>
<td>90.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coefficients

<table>
<thead>
<tr>
<th>Assessment Centre</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>61.838</td>
<td>10.456</td>
<td>5.914</td>
<td>0.000</td>
</tr>
<tr>
<td>Action Orientation</td>
<td>3.717</td>
<td>3.943</td>
<td>0.128</td>
<td>0.943</td>
</tr>
<tr>
<td>Judgement and Decisiveness</td>
<td>4.171</td>
<td>3.779</td>
<td>0.149</td>
<td>1.104</td>
</tr>
</tbody>
</table>

8.2.4.3 Assessment centre and composite behavioural score relationship

The results set out in Table 8.6 on page 8-16, indicate a significant correlation (R = 0.499, Sig = 0.000) between the composite behavioural score as the dependent variable and Self-motivation, Performance Management Skills, Judgement and Decisiveness, Entrepreneurship and Business Operation Skills as independent variables.

Self-motivation made the largest contribution (Beta = 0.229) in the prediction of the composite behavioural score, followed by Performance Management Skills (Beta = 0.193) and Business Operation Skills (0.148). Leadership Skills, Business Strategy Skills, Action Orientation and
Energy were excluded from the regression analysis, due to a problem with collinearity and close to zero beta values.

Table 8.6: Regression Analysis: Assessment Centre and Composite Behavioural Score Relationship

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Adjusted $\hat{R}$</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R$</td>
<td>0.499</td>
<td>0.249</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.249</td>
<td>0.205</td>
</tr>
</tbody>
</table>

Anova

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5</td>
<td>1.108</td>
<td>5.706</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>86</td>
<td>0.194</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td>0.194</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coefficients

<table>
<thead>
<tr>
<th>Assessment Centre</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.237</td>
<td>0.340</td>
<td>3.644</td>
<td>0.000</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>0.183</td>
<td>0.086</td>
<td>0.229</td>
<td>2.125</td>
</tr>
<tr>
<td>Performance Skills</td>
<td>0.109</td>
<td>0.064</td>
<td>0.193</td>
<td>1.695</td>
</tr>
<tr>
<td>Judgement &amp; Decisiveness</td>
<td>0.077</td>
<td>0.070</td>
<td>0.119</td>
<td>1.095</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>0.088</td>
<td>0.084</td>
<td>0.116</td>
<td>1.051</td>
</tr>
<tr>
<td>Business Operation Skills</td>
<td>0.088</td>
<td>0.067</td>
<td>0.148</td>
<td>1.324</td>
</tr>
</tbody>
</table>

8.2.4.4 Behavioural performance and Score point relationship

The results set out in Table 8.7 on page 8-17, indicate a significant correlation ($R = 0.519, \text{Sig} = 0.000$) between the Score point as the dependent variable and Entrepreneurship, Business Operation Skills, Business Strategy Skills, Financial Management Skills and Self-motivation as independent variables.

Self-motivation made the largest contribution ($\text{Beta} = 0.237$) in the prediction of the Score point, followed by Financial Management Skills ($\text{Beta} = 0.208$). Action Orientation, Performance Management Skills and Leadership Skills were excluded from the regression analysis, due to a problem with collinearity and close to zero beta values.
### Table 8.7: Regression Analysis: Behavioural Performance and Score point Relationship

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0.269</td>
<td>0.224</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anova</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>13515669.042</td>
<td>5.000</td>
<td>2703133.808</td>
<td>5.895</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>36682149.165</td>
<td>80.000</td>
<td>458526.865</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50197818.207</td>
<td>85.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-846.925</td>
<td>440.825</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behavioural Performance</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>83.017</td>
<td>129.272</td>
</tr>
<tr>
<td>Business Operation Skills</td>
<td>104.622</td>
<td>137.117</td>
</tr>
<tr>
<td>Business Strategy Skills</td>
<td>74.148</td>
<td>118.143</td>
</tr>
<tr>
<td>Financial Management Skills</td>
<td>237.734</td>
<td>146.247</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>277.853</td>
<td>141.124</td>
</tr>
</tbody>
</table>

#### 8.2.4.5 Behavioural performance and Weighted point relationship

The results set out in Table 8.8 on page 8-18, indicate a significant correlation \((R = 0.550, \text{Sig} = 0.000)\) between the Weighted point as the dependent variable and Performance Management Skills, Financial Management Skills and Energy as independent variables.

Performance Management Skills made the largest contribution \((\text{Beta} = 0.349)\) in the prediction of the Weighted point, followed by Financial Management Skills \((\text{Beta} = 0.222)\) and Energy \((\text{Beta} = 0.122)\). The remaining variables were excluded, due to problems with collinearity and close to zero beta values.

It appears that behavioural performance scores accounts for 30% \((R \text{ Square})\) of the variance in the Weighted point indicator.
Table 8.8: Regression Analysis: Behavioural Performance and Weighted point Relationship

<table>
<thead>
<tr>
<th>Model Summary</th>
<th></th>
<th>Adjusted</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>R Square</td>
<td>R Square</td>
<td>18.012</td>
</tr>
<tr>
<td>0.550</td>
<td>0.302</td>
<td>0.278</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anova</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>12214.600</td>
<td>3</td>
<td>4071.533</td>
<td>12.550</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>28225.805</td>
<td>87</td>
<td>324.435</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40440.405</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>25.808</td>
<td>11.076</td>
<td>2.330</td>
<td>0.022</td>
</tr>
<tr>
<td>Behavioural Performance Management Skills</td>
<td>10.445</td>
<td>3.191</td>
<td>0.349</td>
<td>3.273</td>
</tr>
<tr>
<td>Financial Management Skills</td>
<td>7.023</td>
<td>3.269</td>
<td>0.222</td>
<td>2.148</td>
</tr>
<tr>
<td>Energy</td>
<td>3.637</td>
<td>2.813</td>
<td>0.122</td>
<td>1.293</td>
</tr>
</tbody>
</table>

A summary of the main findings will be discussed in sub-point 8.3, together with the respective hypotheses that were specified in Chapter 6.

8.3 SUMMARY OF FINDINGS AND TESTING OF HYPOTHESES

With reference to Table 8.3 on page 8-9, indicating various Pearson inter-correlations of assessment and performance scores, this research indicates that the best predictors of Score point or actual performance, appear to be in order of significance: Action Orientation, Financial Management Skills, Judgement and Decisiveness, Leadership Skills and Business Strategy Skills. Action Orientation and Financial Management Skills collectively contribute the most to a high Score point. Cross-correlations showed that Action Orientation correlates with Performance Management Skills, Business Operation Skills, and Judgement and Decisiveness. However, Financial Management Skills correlates with Self-motivation.

However, only two variables, namely Judgement and Decisiveness, and Action Orientation, correlate significantly with Weighted point.

On the strength of these findings, the first and third hypothesis are supported, due to statistically significant correlations that were obtained between the assessment centre scores and performance in terms of the Score point, composite behavioural score and Weighted point. These hypotheses were the following:

- Ho1 = The assessment centre results will correlate with the performance results of the BDMs.
- Ho3 = The assessment centre results will predict good performance and success in the work environment, in which the BDM is operating.

The second hypothesis (Ho2 = The performance results of the BDMs will correlate with the competencies as identified in the job profile), is supported by the finding that statistically significant correlations, were also obtained between corresponding fields in respect of the assessment centre scores and the behavioural scores for Judgement and Decisiveness, Business Operation Skills, Leadership Skills, Action Orientation, Self-motivation and Energy.

The fourth hypothesis (Ho4 = The assessment centre as an evaluation instrument, is having an impact on the selection process of the BDM), is partially supported by the significant multiple correlation of 0.519, obtained between supervisors’ behavioural performance ratings and the Score point in Table 8.7 on page 8-17. This signifies that behavioural performance is strongly related to organisational outcomes, indicating
that high managerial ratings correlates with a high Score point. However, the high correlation obtained between the behavioural performance ratings and the Score point, may also be pointing towards bias in terms of the halo-effect. This implies that the Provincial Managers may have shown the tendency to rate a specific BDM, either high or low on the behavioural performance indicators, because they knew the individual to be high or low on his/her Score point. The Provincial Managers, with the exception of a few, may also have evaluated each BDM as an average performer, or by nature of their likeable personalities. The extent, to which the Provincial Managers were biased in the performance ratings, is not clear and is difficult to determine.

In this study, the frequency analysis revealed that the sub-groups for market focus were too small to justify a separate correlation analysis. For the same reason, no correlation analysis was conducted as far as the element of race is concerned. This implies that the fifth hypothesis (Ho5 = The performance results of the BDMs will correlate with the element of race without prejudice), can neither be accepted nor rejected for the purpose of this study.

The descriptive statistics also revealed limited variance on the mean assessment centre score and the composite behavioural score, as indicated in Figure 8.1 on pages 8-5 and 8-6. The limited variance on these two measures may suggest the effect of central tendency. However, the limited variance in the mean assessment centre score may point to the result of data not included, with reference to unsuccessful candidates who were not appointed to the Company as BDMs, and who scored 1’s or 2’s on the five-point rating scale in the assessment centre. Limited score variances normally lead to lower correlations.

In contrast, the Weighted point distribution deviated significantly from the normal distribution, and can be considered less optimal for the purpose of the analysis. It was characterised by a large number of extreme values,
which did not reflect the distribution observed on the Score point and composite behavioural score. However, it is worth noting that the Score point explains 25% of the variance on the Weighted point, whilst behavioural performance explains 30% of the variance on the Weighted point.

The fact that assessment centre data of unsuccessful candidates, applying for BDM positions in the Company, was excluded for the purpose of this study, implies that the seventh hypothesis (Ho7 = The assessment centre results of candidates not assessed but appointed, clearly indicate that the candidate is not recommended for appointment), can also not be accepted or rejected. However, it seems as far as the eighth hypothesis (Ho8 = Senior management does not use assessment centre results when appointments are made) is concerned, that senior management is indeed making use of assessment centre results when appointing BDMs to the Company.

As far as the sixth hypothesis (Ho6 = There is no comparison between assessment centre results and the results of other managerial evaluation instruments, for example a competency-based panel interview) is concerned, a competency-based interview was conducted as part of the screening process in appointing BDMs to the Company. Again, for the purpose of this study, results of other managerial evaluation instruments were not gathered during the data collection process. This hypothesis can also not be accepted or rejected, as only one dimension, namely Leadership, corresponds with the assessment centre.

The factor analysis results indicated that two underlying components explained most of the variance on the assessment centre scores, as shown in Figure 8.2 on page 8-11. These results could indicate construct validity, provided that the two-component solution can be explained. This is indeed the case as Component 1 represents the eight dimensions, which can broadly be defined as embedded entrepreneurial and leadership qualities, as assessed in the leaderless group discussion exercise, in-basket and coaching interview simulation. Component 2
however, is representative of the five dimensions or essential qualities for effective day-to-day business management, as assessed in the written case study. The groupings therefore, are logical and justified.

In addition, the factor analysis results also revealed a largely similar pattern for the behavioural performance indicators, as illustrated in Figure 8.3 on page 8-13. However, it seems that these indicators were not as well defined, as in the case of the assessment centre scores. A one-component solution proved to be the best solution for the behavioural performance scores, and explained most of the variance in respect of these scores. The strong inter-relationships that were obtained between the behavioural performance scores, may signify bias in ratings in terms of the halo-effect. As mentioned earlier, it is difficult to determine the level of raters’ bias in respect to the halo-effect. The Adaptability scale of behavioural performance appeared to be poorly defined or possibly misinterpreted by the Provincial Managers, and does not form part of the underlying behavioural performance indicator.

It seems as if the factor analysis performed on the supervisors’ behavioural performance ratings, were very similar to the assessment centre results. The two main components were largely replicated and indicate that the behavioural competencies and their inter-relationships are understood and manifested in a consistent manner, for both the assessment centre evaluations and supervisors’ performance ratings.

However, the findings on the study will be compared in sub-point 8.4 with previous research, as discussed in Chapter 3.

**8.4 COMPARISON WITH PREVIOUS RESEARCH**

The findings on this study in general, support the findings of previous research with reference to predictive validity and construct validity respectively.

The results suggest that the managerial assessment centre has a low (0.251), moderate (0.414) and high (0.499) predictive validity, depending
on the performance criteria used. These results compared well to the results of similar studies conducted elsewhere.

Gaugler et al. (1987) however, found that the estimated validity of the final overall assessment rating was 0.37. There was also considerable variation in validity results above and below this figure. Some variations signifying success were 0.25 or 0.15, where others were as high as 0.55 or 0.65. The standard deviation was 0.12. Table 3.1 in Appendix E, summarises several reviews of other research findings, including Gaugler, Rosenthal, Thornton and Bentson’s most recent statistical analysis of prior studies, with regard to the predictive validity of overall assessment ratings. The assumption can therefore be made that people, who obtain higher scores on the overall assessment rating, will probably be more successful on the job than people with a lower score.

Data from the Management Progress Study summarised in Table 3.2 (Appendix F), also illustrates the predictive accuracy of the assessment centre. It was found that 48% of the college graduates, who were predicted by the assessment centre to reach middle management, had actually attained this level in 1965, whereas only 11% of those who were not predicted to reach middle management, had succeeded. For non-college people, 32% of those predicted to reach middle management, had succeeded in comparison to only 5% of those receiving low ratings.

According to Cascio (1991), the drawback of organisational outcome variables in predictive studies, for example salary, sales, and production, is that they are complexly determined and are influenced extensively by situational and environmental determinants. The results of the study confirmed that the predictive validity of the assessment centre is superior in terms of behaviourally related performance criteria (composite behavioural scores), compared to organisational outcome variables (Score point and Weighted point).

Gaugler et al. (1987) also studied variables that correlated with the validity of the assessment centre. The results showed that the validity of
RESEARCH RESULTS

assessment centres increases with a particular variable, for example, the number of different types of exercises, features of the assessment centre procedures, and characteristics of participants and assessors.

Further evidence that situational variables affect validities, originates from a study where an assessment centre was used to select secondary school principals (Schmitt et al., 1990). It was found that the assessment centre was more accurate in predicting a criterion of effectiveness as perceived by teachers.

In three other studies, the ability of across-exercise dimension ratings was investigated to predict salary progress. Bray & Grant (1966) examined the relationship between nine clusters of dimensions and salary progress. They found that for four samples of men, correlations ranged from -0.41 to +0.57, and that 20 of the 29 correlations were positive and significant. In the second study, the average correlation between across-exercise dimension ratings and salary progress was only 0.17 (Mitchel, 1975). Lastly, Outcalt (1988) reported significant correlations between eight dimension ratings and salary level, ranging from 0.13 to 0.17.

However, Hinrichs (1978) found that for most dimensions, the accuracy of prediction increased as time after assessment increased. The average correlation one year after assessment was 0.28, compared to 0.42 after eight years.

Job performance ratings were used as the criterion measures in the next four studies. Thomson (1970) found that across-exercise dimension ratings made by both psychologist assessors and manager assessors, correlated with supervisor ratings on the same 13 dimensions, obtained six months to two years, after the assessment centre. Outcalt (1988) found meaningful correlations with a special appraisal of on-the-job performance, using newly developed scales. In another study, Huck & Bray (1976) found that the average correlation between four assessment factors and six job performance dimensions was 0.28 for white
participants and 0.18 for black participants. Finally, Konz (1988) found that only one of 10 dimensions correlated with a measure of job performance.

Against the background of these results, Cascio (1991) is of the opinion that assessment centres are behaviourally based, and should be related to behaviourally based multiple criteria, to allow a better understanding of the predictive value of the assessment centre.

As far as construct validity is concerned, there is a clear indication from the component analysis in the study, that two underlying components explain most of the variance on the assessment centre scores. These results could indicate construct validity, provided that the two-component solution can be explained. This is indeed the case as Component 1 represents the eight dimensions, which can broadly be defined as embedded entrepreneurial and leadership qualities, as assessed in the leaderless group discussion exercise, in-basket and coaching interview simulation. Component 2 however, is representative of the five dimensions or essential qualities for effective day-to-day business management, as assessed in the written case study. The groupings therefore, are logical and justified.

Construct validity evidence is broader in scope and consists of information that supports or refutes the claim, that the procedure measures the psychological characteristics of interest (American Educational Research Association et al, 1985). No single study or correlation figure determines what a test is measuring. The accumulated information from many studies must be examined in order to interpret the real meaning of test scores.

Lastly, it is necessary to mention a very relevant study that is typical to this research project. According to Byham (1970, p 154), one of the most common kinds of validity checking had been done, where a follow-up study was conducted on candidates who have been assessed at an operating assessment centre, and then promoted and developed by a
management team that was aware of the assessment findings. Six such studies reported correlations between assessment findings and subsequent performance. The correlations ranged between 0.27 and 0.64. In one of those studies at IBM, entry level and middle level managers revealed a correlation of 0.37. It seems that in general, assessments of potential for positions above the first level, are more valid than assessments for positions at the first level.

8.5 SUMMARY

This brings to conclusion the discussion regarding the research results of the study. The focus was on the application of four statistical techniques, which include descriptive statistics, correlation coefficients, factor analysis, and multiple regression analysis. Various hypotheses were tested as specified in Chapter 6, and the findings on the study in general, were compared with findings of previous research, as discussed in Chapter 3.

In Chapter 9, the emphasis will be on final conclusions surrounding the predictive validity of the managerial assessment centre, used by the Company during the selection process in appointing BDMs.
CHAPTER 9

CONCLUSIONS
9.1 INTRODUCTION

The main problem identified in this study, was that no conclusive evidence is currently available to indicate that BDMs, appointed to this insurance company since January 2001, by means of competency-based assessment procedures, are successful and meet their respective business targets. In predicting the validity of the managerial assessment battery, behaviour required for success can adequately be identified. This will give a clear indication of behaviour and skills needed to contribute to the profitability of the Company.

In this chapter, a critical look will be taken at the main findings of this research study.

9.2 CONCLUSIONS

Against the background of the reasons why this study was conducted, certain conclusions can be made, based on the results of the research.

As far as the total predictive validity of the assessment centre is concerned, the validity of the assessment centre varied between low to moderate and high in predicting managerial performance in accordance with the Weighted point \( R = 0.251 \), Score point \( R = 0.414 \) and behavioural performance \( R = 0.499 \). The values of 0.414 and 0.499 can be considered highly satisfactory, compared to the results of similar studies conducted elsewhere.

This noticeable difference in validity coefficients for the assessment centre can be explained. Assessment centres are essentially behavioural-based assessments and should relate better to supervisors' performance ratings, which are behavioural based as well. The drawback of ratings in terms of tangible outcomes, such as the Score point or Weighted point, is that they are complexly determined and are influenced extensively by situational and environmental determinants. This explains the slightly lower validity coefficient. However, the conclusion can thus be made that the predictive validity of the
assessment centre is superior in terms of behaviour related managerial performance, compared to organisational outcome variables, which is consistent with what is to be expected from behaviourally based assessment instruments.

A statistical significant multiple correlation of 0.519 was also obtained between the supervisor’s rating of behavioural performance and the Score point, which signifies that performance in terms of work behaviour, relates strongly to tangible performance outcomes as well. The assessment of behavioural performance dimensions should be included as part of the routine assessment of managers, as these dimensions could contribute significantly to an understanding of the effectiveness of behaviourally based assessments, as well as contributing to the relationship between behavioural performance and tangible performance outcomes. This finding indicates that high managerial ratings, correlates with a high Score point.

However, the extent, to which the Provincial Managers were biased in the performance ratings with reference to the halo-effect, is not clear and difficult to determine. Provincial Managers should be sensitised to the limiting effect of bias, and be careful not to over-rate BDMs, only because of a high Score point, or by nature of their likeable personalities.

The best predictors of actual performance or Score point in order of significance, appear to be Action Orientation and Financial Management Skills, followed by Judgement and Decisiveness, Leadership Skills and Business Strategy Skills. This imply that BDMs who scored high on these five behavioural dimensions, as determined by means of the assessment centre, will most probably achieve a high Score point. However, BDMs with low scores on these dimensions will in all probability perform at the lower end of the scale in terms of a Score point.

The best predictors of managerial behavioural performance appear to be Self-Motivation, Performance Management Skills, and Judgement and Decisiveness, followed by Action Orientation, Entrepreneurship,
Leadership Skills, Business Operation Skills, Business Strategy Skills and Energy. It seems that these behavioural dimensions will predict supervisor performance ratings best.

The best predictors of the Weighted point are Action Orientation, and Judgement and Decisiveness. The conclusion can be drawn that only these two behavioural dimensions, will predict a high Weighted point.

It is worth noting that these results differ from the end-result, where the key stakeholders in the Company had to rate the 13 dimensions assessed in the assessment centre, in order of importance, prior to the assessment process. The order of importance for these 13 dimensions were as follows:

1 = Entrepreneurship.
2 = Performance management skills.
3 = Leadership skills.
4 = Coaching skills.
5 = Business operation skills.
6 = Business strategy skills.
7 = Financial management skills.
8 = Action orientation.
9 = Judgement and decisiveness.
10 = Assertiveness.
11 = Adaptability.
12 = Self-motivation.
13 = Energy.

Action Orientation and Financial Management Skills were the two best predictors of actual performance in the study. However, the stakeholders only rated these two dimensions in the eighth and seventh position respectively. Judgement and Decisiveness, Leadership Skills and Business Strategy Skills were rated in ninth, third and sixth position.
The best three predictors of managerial behavioural performance in the study were Self-Motivation, Performance Management Skills, and Judgement and Decisiveness. These three dimensions were in the twelfth, second and ninth position respectively.

It seems as if mixed success was achieved by the stakeholders in rating these dimensions in order of importance, prior to the assessment process. This signifies the importance of research to be conducted on the validity of assessment instruments, applied to various selection processes within an organisation.

Another interesting conclusion is that both Action Orientation, and Judgement and Decisiveness, appear to be very good predictors of actual performance, managerial behavioural performance and the Weighted point.

The factor analysis results indicated that two underlying components, explained most of the variance on the assessment centre scores. These results could indicate construct validity, provided that the two-component solution can be explained. This is indeed the case as Component 1 represents the eight dimensions, which can broadly be defined as embedded entrepreneurial and leadership qualities, as assessed in the leaderless group discussion exercise, in-basket and coaching interview simulation. Component 2 however, is representative of the five dimensions or essential qualities for effective day-to-day business management, as assessed in the written case study. The groupings therefore, are logical and justified.

In addition, the factor analysis results also revealed a largely similar pattern for the behavioural performance indicators, but these indicators did not appear to be as well defined as in the case of the assessment centre scores. A one-component solution proved to be the best solution for the behavioural performance scores, and explained most of the
variance in respect of these scores. The strong inter-relationships that were obtained among the behavioural performance scores, may signify bias in ratings.

It seems as if the factor analysis performed on the supervisors’ behavioural performance ratings, were very similar to the assessment centre results. The two main components were largely replicated and indicate that the behavioural competencies and their inter-relationships are understood and manifested in a consistent manner, for both the assessment centre evaluations and supervisors’ performance ratings.

It can be concluded that what is measured during the assessment centre evaluation, is largely similar to what is measured in the supervisors’ performance ratings. The factor analysis results revealed therefore, that the supervisors’ rating of performance is projecting a clear indication of the overall performance of the BDMs. This is in line with what can be expected when behavioural performance is assessed in the work place. Overall, the evidence acquired by means of factor analysis, provides additional credibility to the findings of the study.

9.3 SUMMARY

In general, it can be concluded that the managerial assessment centre appears to have significant predictive validity. Behaviour required for acceptable performance and success as a BDM, has now been identified and will project a clear indication to the assessment centre specialists within the human resource department, regarding behaviour and skills needed to contribute to the profitability of the Company. The use of this instrument is having an impact on the selection process of BDMs, and may also result in substantial financial and cultural benefits for the Company.

Suggestions and recommendations regarding the findings in the research will be attended to in Chapter 10.
CHAPTER 10

RECOMMENDATIONS
10.1 INTRODUCTION

Against the background of the results and conclusions of the study, which were addressed in Chapters 8 and 9, certain recommendations will be discussed in order to make a contribution to the profitability of the Company, and add value to organisational success. This may lead to specific interventions being implemented in the Company.

After discussing the recommendations arising from the study, the following sub-points will briefly be addressed in this chapter:

- Future challenges.
- Barriers to advancement in assessment.
- Continued research efforts.

10.2 RECOMMENDATIONS

Certain recommendations can be made with regard to suggested interventions, based on the research results.

Significant validities were obtained in favour of the assessment centre. However, the validity of the selection battery used by the Company in appointing BDMs, is expected to increase significantly, when assessment centre scores are used in combination with objective tests, such as mental ability and personality tests, and structured interviewing techniques.

The assessment of behavioural performance dimensions should be included as part of the routine assessment of BDMs, as these dimensions could contribute significantly to an understanding of the effectiveness of behaviourally based assessments, as well as that of the relationship between behavioural performance and tangible performance outcomes. However, these dimensions will have to be well defined and described to the Provincial Manager when assessing BDMs in his/her business unit, in order for a common understanding to prevail amongst all Provincial
Managers concerning these dimensions. It seems as if the Adaptability scale of behavioural performance, was not well defined at all in this study.

Assessment centre observers and supervisors should be sensitised to the limiting effect of assessment bias, as indicated in this study with reference to central tendency and the presence of the halo-effect. The use of a seven-point rating scale instead of a five-point rating scale could also be considered to help overcome psychological barriers, which inhibit optimal utilisation of the full spectrum of options on the five-point scale. A seven-point scale provides more scope for score variation and can consequently, result in better discrimination of performance levels.

As discussed in Chapter 3, a human resource management procedure has utility, if the benefits from the technique exceed the costs by some significant amount. Utility analysis requires that the new assessment procedure be compared with the organisation’s existing selection procedure, in order to demonstrate that there is some improvement in the benefit-cost ratio. According to Van der Maesen de Sombreff & de Veer (1997, p 155), there is a formula available to determine the utility of a procedure. Details of the formula have been described on page 3-45 in sub-point 3.7.2.3 (Validity and cost of alternative procedures) of Chapter 3.

Unfortunately, the validity and cost of the old method is not known (in this case there was no old method due to the newly created position of BDM), and therefore, the utility for this managerial assessment centre can not be calculated. However, if changes are to be made to the assessment battery currently in use, the utility of the new procedure can then be calculated with ease.

The validity of the Weighed point as an objective performance criterion, against which assessment results can be evaluated, is questionable. It is suggested that the process according to which the Weighted point is compiled, as described in sub-point 4.6 (Remuneration and Recognition)
of Chapter 4 on pages 4-14 and 4-15, be reviewed prior to future use in similar studies.

Based on this research study, the assessment centre has significant predictive validity. The use of this instrument may result in substantial cultural and financial benefits for the Company, if:

- Candidates with the behavioural dimensions indicated, are recruited.
- Proven dimensions are investigated during panel interviews.
- Assessment centre specialists in the Company evaluate the indicated dimensions in-depth and allocate weights as far as degrees of importance is concerned, for the purpose of predicting success.
- Assessment instruments used to select BDMs in the Company, are based on the proven dimensions.
- Dimensions that correlate with managerial performance, are evaluated and re-defined in the form of behavioural indicators.
- Well-proven dimensions are continually monitored and rewarded in performance management.
- Formal and informal development initiatives focus on the proven dimensions as scientifically researched, for new and existing BDMs.

Against the background of these challenges specified for the Company, it is deemed necessary to universally evaluate the predictions of challenges surrounding assessment centres in organisations in the foreseeable future.

10.3 FUTURE CHALLENGES

Thornton (1992, pp 222-223) is of the opinion that there will not be a decrease in the use of assessment centres in organisations. This is due to the fact that there are many indications that the assessment centre enterprise is growing consistently, particularly in the following ways:

- Numerous research articles continue to appear in professional journals.
- Programmes on assessment centres continue to be presented at
RECOMMENDATIONS

scientific and practitioner conventions, such as those of the Society for Industrial and Organizational Psychology, the Academy of Management, and the International Congress on the Assessment Center Method.

- Participation at the International Congress on the Assessment Center Method continues to grow, reaching a record-high attendance level of over 250 delegates in Toronto, Ontario, Canada in 1991.
- Utilisation of assessment centres is increasing in many countries around the world.
- The assessment centre method is being utilised with increased frequency in public sector organisations, including city municipalities, state agencies, public school districts, and federal agencies.
- A survey done by B.B. Gaugler, C. Bentson and K. Pohley of over 200 organisations, revealed that assessment centres are utilised for a wide variety of purposes.
- Numerous consulting organisations throughout the United States, Europe, South Africa, Israel and Japan specialise in designing and implementing assessment centres.
- Some of the largest consulting organisations providing an assessment centre service, such as Development Dimensions International, Personnel Development Incorporated, Assessment Designs, and Electronic Selection Systems Corporation, report that their assessment business has increased in recent years.

As far as the South African context is concerned, there is widespread interest where practitioners are sharing experiences and case studies at conferences, such as the Annual Assessment Centre Study Group Conference. Various research-based projects and post-graduate research studies are also presented annually at the conference of the Society for Industrial and Organisational Psychology (SIOPSA). Information regarding the science and practice of Industrial and Organisational Psychology are shared, and innovative topics that may have been underrepresented in past conferences, are particularly attended to.
Apart from these scientific conventions, there are also a large number of organisations in South Africa, where assessment centres are utilised for a wide variety of purposes. Consulting organisations are also providing a specialised service on assessment centre technology to numerous other organisations for specific reasons.

However, all this activity does not mean that the assessment centre of the future, will necessarily be the same as the assessment centre of the past. There are many indications that some applications of the assessment centre method, are changing.

It appears that practitioners are using two paths in utilising the method (Thornton, 1992, pp 223-224). The first path represents a continuation of the traditional approach to assessment centres. This approach is described in the *Guidelines and Ethical Considerations for Assessment Center Operations* (Task Force, 1989) on page 2-27 in sub-point 2.6 (*Essential Features of an Assessment Centre*) of Chapter 2. The second path, which is generically called the “assessment centre method”, represents a set of innovations that involve one or more of the principles of the traditional assessment centre.

Byham (1989) points out that the assessment centre method is being “deformalised” with reference to the second path. This implies that the standard elements of an assessment centre, required by the *Guidelines*, are being changed to make the procedure more streamline and flexible. Changes can be seen in the way exercises are administered, how performance is evaluated, and observations integrated. Administrative changes may not necessarily require that participants and assessors attend as a group. Instead, the following options may be considered:

- Participants engage in exercises, for example, an in-basket and case study, at remote locations.
- Videotapes of an oral presentation are made.
- The background interview is conducted telephonically.
- The in-basket is administered via a computer hook-up to a central location.

However, this “disassembled” procedure does not permit the use of group exercises, such as leaderless group discussions or complex business games.

According to Heine (1989), observation and scoring procedures can also be varied. For example, an assessor can watch a videotape of an oral presentation when his/her schedule permits. Alternatively, the videotapes may be conveyed to a central location, where specially trained assessors evaluate and integrate the results. Computers can also be applied to aggregate dimension ratings, if the assessor makes use of a behaviour checklist to record the behaviours he/she observed.

Further changes can be made to the process of the integration discussion (Thornton, 1992, pp 224-225). Assessors may not meet face-to-face in a formal integration discussion. Instead, they may submit reports and evaluations of performance, which are computerised and programmed to project the final dimension ratings, and calculate by formula the weights of each score according to the importance of the corresponding dimension, or according to the experience of the assessors in the organisation. The results are then conveyed to the assessors, who in turn, determine ratings of overall performance. These overall ratings are then compiled centrally. However, all of these innovations have been tested in some organisations, but very little evaluation research has been conducted to prove their consistency and accuracy.

In this regard, Hollenbeck (1990) conducted a telephonic survey with nine leaders in the field of assessment centre methodology, posing several questions regarding the present, past and future of assessment centres. Based on the information gathered, the following predictions for the future of assessment centres were made:
- More computerisation.
- More job-specific assessment.
- Fewer paper-and-pencil tests.
- More dimension-specific simulations.
- More technical advances in simulations.
- Fewer actual “centres” where participants and assessors meet over a period of days.
- The institution of a national “skills index” card for each participant, displaying particulars of his/her particular capabilities.

However, many ethical, professional, and technical questions come to mind and would have to be answered, before a wide endorsement of this last proposal could be expected.

Against the background of these challenges faced by the assessment centre enterprise, a few of the barriers to advancement in assessment, will be identified and discussed in sub-point 10.4.

**10.4 BARRIERS TO ADVANCEMENT IN ASSESSMENT**

If assessment centres are to progress towards directions noted above, and if they are willing to assist organisations dealing with business challenges in the future, they must be developed and researched as intensely as they have been in the past. This suggests a notable opportunity for practitioners and researchers in the human resource management field. However, there is a concern that due to extensive evaluation research having been performed in the past, and because organisations may resist further research due to budget constraints, innovations will proliferate without solid research to determine their effectiveness.

Thornton (1992, pp 226-229) identified the following two barriers to advancement in assessment:
- Developmental assessment.
- Assessing dimensions for the “Manager of the Future”.

These two barriers will briefly be discussed in sub-point 10.4.1 and 10.4.2.

10.4.1 Developmental assessment

The clear trend seems to be towards more developmental applications of the assessment centre method. According to Thornton (1992, p 226), three concerns arise in this regard.

Primarily, there must be a distinction between various dimensions to generate results, which are useful in prescribing different types of training programmes. The assessment centre must be designed and implemented in order to provide final dimension ratings, measuring distinct competencies. With pressures to streamline the process and make it more efficient, the quality of the dimension ratings may not allow for adequate identification of separate strengths and weaknesses.

Secondly, assessment results must give clear guidelines for development. For the results to be most effective in a developmental programme, specifics must be provided for the various follow-up training programmes, which will benefit the participant. This implies that the assessment team must compile a developmental programme for the individual that matches his/her specific needs, and provides training in a way that is suitable to the individual’s learning styles. It is particularly difficult to assess the characteristics that influence learning effectiveness. Clear directions on how to measure styles and apply them in practical situations, have not yet been produced (Thornton, 1992, p 227).

The third concern about the increased utilisation of assessment centres for developmental purposes, is that there has been little research to the effectiveness of these applications (Thornton, 1992, p 228). Most of the research dealt with the predictive accuracy of assessment centres,
designed for selection and promotional purposes. Based on this research, the assumption can therefore, not be made that assessment centres are useful for developmental purposes as well.

10.4.2 Assessing dimensions for the “Manager of the Future”

There has been much discussion about the need for change in managerial responsibilities, in order to meet the growing demands, which ultimately include dimensions of managerial effectiveness. Dimensions such as “strategic planning”, “entrepreneurialship”, “ability to manage work”, and “transformational leadership”, have been identified as important for managerial effectiveness in the future (Thornton, 1992, p 228). However, these abstract notions must be made more concrete in the form of behaviours that can be assessed objectively. Equally to the more traditional dimensions, such as delegation, planning and organising and communication skills have been assessed in the past, is there reason to believe that simulation technology can provide the means to assess these dimensions accordingly.

A similar type of innovation in assessment is needed at executive and general management level. DeVries & White (1989) and White & DeVries (1990) have observed that the dimensions assessed at executive level, are different from the attributes that are important at middle and lower levels. For example, strategic thinking, dealing with ambiguity and uncertainty, and developing effective teams, are all necessary skills for executives. In addition, there is a set of basic beliefs, including values and attitudes, which interact with knowledge and skills to determine executive effectiveness. Assessment centres have not traditionally provided assessments for these executive level attributes.

Studies by the Center for Creative Leadership have shown that successful executives thrive on challenge and learn from chaotic situations (Thornton, 1992, p 229). Assessment centres have not yet evaluated the abilities to learn from experience, but are almost always “one shot” evaluations. What is needed, according to DeVries &
White (1989), is some way to assess the executive periodically and to understand his/her resilience and adaptability over time. In addition, assessment centres need to assess the specific employee-to-job fit, and not just the more general executive management attributes. This implies that the assessment system must include a better way of placing individuals in situations that will test, stretch, and develop them. To achieve this, better means of assessing job characteristics is needed, in relation to the developmental potential of the individual.

If these barriers in the assessment arena could be overcome, a whole new world of research efforts will be revealed to practitioners and researchers in the human resource field.

10.5 CONTINUED RESEARCH EFFORTS

Innovations in assessment centre technology are exciting and encouraging. Thornton (1992, p 229) stated that there is extensive experimentation in every aspect of the assessment centre method, such as the following:

- New dimensions and revised definitions of traditional dimensions.
- New exercises.
- Computerised presentation of exercises.
- New procedures for recording observations.
- Automated methods of reporting results.
- New methods for integrating results.

However, the need to accumulate evidence to support these innovations is a concern (Thornton, 1992. pp 229-230). It is necessary to know whether a seemingly small change, alters the consistency and accuracy of assessment centre results. The assessment centre method has proclaimed its widespread success, because of the extensive basic and applied research conducted by numerous large and small organisations. Currently, research units in human resource departments have been trimmed substantially, as part of the general move to re-organise
and eliminate staff positions. It is therefore, questionable whether a comparable level of research will be conducted to investigate the innovations, as there is certainly more to learn about the many innovations in assessment centre methodology.

10.6 SUMMARY

In retrospect, an overview by Thornton & Byham (1982, pp 391, 397-398, 405) will be conducted in this sub-point on the past, present and future of assessment centres, followed by a brief overview of this particular research study.

The experience with assessment centres over the past 25 years played an important role in the knowledge base of management and assessment processes. Since inception, the AT&T Management Progress Study progressed to the most recent applications in diverse jobs and organisational settings. The assessment centre method has therefore, established itself as a valuable research technique and a practical personnel assessment tool. The development and application of the method has advanced each individual’s understanding of the components of managerial work, the characteristics of effective assessment techniques, and the elements of an effective process of interpersonal judgement.

There is also a lesson to be learnt from the high professional standards, evidenced by assessment centre specialists. The assessment centre method has been subjected to more research and professional scrutiny than any other personnel practice. There are good prospects for continued validity of the assessment centre method. This is due to high quality research and generally positive results, the development of standards for assessment centre operations, and widespread self-monitoring to ensure compliance with proven practices.

As far as the present status of the assessment centre method is concerned, research has shown that well-designed assessment centres
RECOMMENDATIONS

can be effective, but there is no assurance that every application will be appropriate. It is therefore, important to explore the limits of research evidence, articulate the implicit assumptions of various types of assessment centres, and discuss professional and ethical issues, raised by assessment centre specialists and critics. In this way, current limitations can be overcome and inappropriate criticisms answered.

Twenty-five years of research have established the predictive accuracy of the assessment centre process. This contributed largely to a common understanding of management and assessment. However, there are many areas that require additional research, as previously described in this chapter. The role of assessment centres in performance appraisal, selection and training can also be added to the research list. The limits of the assessment centre method and the reasons why it works, can also be explored. Studies of the effects of assessment centres and how to maximise payoffs, can be conducted. Finally, the application and extension of personality, social, and judgement theories relevant to management assessment, can also be looked at.

With reference to this research study being conducted, no conclusive evidence was available to indicate that BDMs, appointed within this particular insurance company, by means of competency-based assessment procedures, are successful and meet their respective business targets. The purpose of the study, therefore, was to establish the predictive validity of the managerial assessment centre, used to select and appoint BDMs to the Company.

The sample for this study consisted of a convenience sample of 92 managers, who participated in an assessment centre evaluation for managerial competencies. Assessment centre ratings were measured against three different variables, which were the Score point, Weighted point and performance ratings conducted by each Provincial Manager, evaluating his/her team of BDMs respectively. Assessment centre data, performance data, and biographical and other company-related
information were collected accordingly. The data was screened and statistically analysed using descriptive statistics, correlation coefficients, factor analysis and multiple regression analysis.

As far as the total predictive validity of the assessment centre is concerned, the validity of the assessment centre varied between low to moderate and high in predicting managerial performance in accordance with the Weighted point \( R = 0.251 \), Score point \( R = 0.414 \) and behavioural performance \( R = 0.499 \). The conclusion can thus be made that the predictive validity of the assessment centre is superior in terms of behaviour related managerial performance, compared to organisational outcome variables, which is consistent with what is to be expected from behaviourally based assessment instruments.

A statistical significant multiple correlation of 0.519 was also obtained between the supervisor's rating of behavioural performance and the Score point, which signifies that performance in terms of work behaviour, relates strongly to tangible performance outcomes as well. This finding indicates that high managerial ratings, correlates with a high Score point.

The factor analysis results indicated that two underlying components explained most of the variance on the assessment centre scores. These results could indicate construct validity, provided that the two-component solution can be explained. This is indeed the case as Component 1 represents the eight dimensions, which can broadly be defined as embedded entrepreneurial and leadership qualities, as assessed in the leaderless group discussion exercise, in-basket and coaching interview simulation. Component 2 however, is representative of the five dimensions or essential qualities for effective day-to-day business management, as assessed in the written case study. The groupings therefore, are logical and justified.

In addition, the factor analysis results also revealed a largely similar pattern for the behavioural performance indicators, but these indicators did not appear to be as well defined as in the case of the assessment centre scores. A one-component solution proved to be the best solution for the behavioural performance scores, and explained most of the variance in respect of these scores. The strong inter-relationships that were obtained between the behavioural performance scores, may signify bias in ratings.

It seems as if the factor analysis performed on the supervisors’ behavioural performance ratings, were very similar to the assessment centre results. The two main components were largely replicated and indicate that the behavioural competencies and their inter-relationships are understood and manifested in a consistent manner, for both the assessment centre evaluations and supervisors’ performance ratings. It can be concluded that what is measured during the assessment centre evaluation, is largely similar to what is measured in the supervisors’ performance ratings. The factor analysis results revealed therefore, that the supervisors’ rating of performance is projecting a clear indication of the overall performance of the BDMs. This is in line with what can be expected when behavioural performance is assessed in the workplace.
Overall, the evidence acquired by means of factor analysis, provides additional credibility to the findings of the study.

A limiting factor in this study was the difficulty in determining the extent to which performance ratings are biased. Provincial Managers should be sensitised to the limiting effect of bias and be careful not to over-rate BDMs, only because of a high Score point or of their likeable personalities. The effect of central tendency and/or the selection ratio also appears to limit the score variance of the assessment centre. Another limitation was that the Weighted point has been characterised by a large number of extreme scores, where the distribution deviated significantly from the normal distribution.

As far as recommendations are concerned, the validity of the selection battery used by the Company in appointing BDMs, is expected to increase significantly, if assessment centre scores are used in combination with objective tests and structured interviewing techniques. Proven dimensions identified in the study, must be evaluated and re-defined in the form of behavioural indicators, and weights allocated for each dimension in terms of importance. These well-proven dimensions must continually be monitored and rewarded in performance management, and be linked to formal and informal development initiatives.

The assessment of behavioural performance dimensions should also be included as part of the routine assessment of BDMs, as these dimensions could contribute significantly to an understanding of the effectiveness of behaviourally based assessments, as well as that of the relationship between behavioural performance and tangible performance outcomes. In this regard, assessment centre observers and supervisors should be sensitised to the limiting effect of assessment bias. The use of a seven-point rating scale instead of a five-point rating scale will provide more scope for score variation, and can consequently result in better discrimination of performance levels.
Generally, it can be concluded that the managerial assessment centre, appears to have significant predictive validity. Future performance of individuals can be predicted substantially more accurately, when applying the results of the assessment centre as part of the selection process, compared to not utilising the assessment centre at all. The results obtained in this study, compared well to the results of similar studies conducted elsewhere. Research evidence suggests that, when applied correctly, assessment centre evaluations can contribute significantly to effective employment decisions. Therefore, the application of the assessment centre could result in substantial cultural and financial benefits for this insurance company, in respect of increased productivity and reduced employment costs.

With reference to future research efforts related to this study, several hypotheses specified in the study, could neither be accepted nor rejected, because of limited research data available during the period of research. For example, the fifth hypothesis was developed to indicate whether or not performance results of the BDMs, would correlate with the element of race without prejudice. The same applies to the seventh hypothesis, which clearly indicated that assessment centre results of candidates not assessed but appointed, is not recommended for appointment.

Results of other managerial evaluation instruments were also not gathered as part of the data collection process, for the reason of comparing assessment centre results to the results of these instruments, making it currently impossible to either accept or reject this sixth hypothesis. Apart from these hypotheses, the results of formal and informal development initiatives implemented, linked to performance management measures and interventions, can also be considered within the BDM context.

However, these concepts and experiences could definitely form part of specific research themes, which can be constructed, closely examined
and presented to interested practitioners as valuable case studies for mutual benefit.

In conclusion, it must be accepted that competency-based assessment can only be beneficial, if it is seen as a critical part of any selection process, implemented in an organisation. This will result in value adding benefits to all parties concerned, and ultimately, lead to an assessment centre programme under constant review and change.
### Table 2.1: Comparison of Assessment Centres

<table>
<thead>
<tr>
<th></th>
<th>Promotion or Selection</th>
<th>Diagnosis of Training Needs</th>
<th>Development of Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td>High-potential employees or applicants</td>
<td>All interested employees</td>
<td>All interested employees</td>
</tr>
<tr>
<td><strong>Position to be analysed</strong></td>
<td>Job to be filled now or in future</td>
<td>Current or future job</td>
<td>Current or future job</td>
</tr>
<tr>
<td><strong>Number of dimensions</strong></td>
<td>Fewer (for example, 5-7), more global</td>
<td>Many (for example, 8-10), more specific</td>
<td>Fewer (for example, 5-7)</td>
</tr>
<tr>
<td><strong>Nature of dimensions</strong></td>
<td>Potentialities, traits</td>
<td>Developable, conceptually distinct</td>
<td>Trainable skills</td>
</tr>
<tr>
<td><strong>Number of exercises</strong></td>
<td>Few (for example, 3-5)</td>
<td>Many (for example, 6-8)</td>
<td>More than one of each type</td>
</tr>
<tr>
<td><strong>Types of exercises</strong></td>
<td>Generic</td>
<td>Moderate similarity to job</td>
<td>Work samples</td>
</tr>
<tr>
<td><strong>Time required for assessment</strong></td>
<td>Relatively short (for example, 0.5-1 day)</td>
<td>Relatively long (for example, 1.5-2 days)</td>
<td>Relatively long (for example, 1.5-2 days)</td>
</tr>
<tr>
<td><strong>Type of report</strong></td>
<td>Short, descriptive</td>
<td>Long, diagnostic</td>
<td>Immediate verbal report</td>
</tr>
<tr>
<td><strong>Who gets feedback</strong></td>
<td>Participant, manager two levels up</td>
<td>Participant and supervisor</td>
<td>Participant, possibly supervisor</td>
</tr>
<tr>
<td><strong>Who gives feedback</strong></td>
<td>HRM staff</td>
<td>HRM staff or assessor</td>
<td>HRM staff, trainer, or facilitator</td>
</tr>
<tr>
<td><strong>Important outcome</strong></td>
<td>Overall assessment rating</td>
<td>Dimension ratings</td>
<td>Behavioural suggestions</td>
</tr>
</tbody>
</table>

*Source: Thornton (1992, p 45).*
### Table 2.2: Percentage of Assessment Centres Assessing Various Dimensions

<table>
<thead>
<tr>
<th>Dimensions Assessed</th>
<th>Percentage of Assessment Centres using Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current skills</strong></td>
<td></td>
</tr>
<tr>
<td>Sales ability</td>
<td>21%</td>
</tr>
<tr>
<td>Development of subordinates</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Abilities</strong></td>
<td></td>
</tr>
<tr>
<td>Planning and organising</td>
<td>86%</td>
</tr>
<tr>
<td>Oral communication</td>
<td>91%</td>
</tr>
<tr>
<td><strong>Potentialities</strong></td>
<td></td>
</tr>
<tr>
<td>Judgement</td>
<td>74%</td>
</tr>
<tr>
<td>Creativity</td>
<td>18%</td>
</tr>
</tbody>
</table>

*Source: Gaugler et al (1990).*
Table 2.3: Comparison of Two Theories of Social Judgement

<table>
<thead>
<tr>
<th></th>
<th>Behaviour-driven Theory</th>
<th>Schema-driven Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternate terms</strong></td>
<td>Bottom-up approach</td>
<td>Top-down approach</td>
</tr>
<tr>
<td></td>
<td>Behavioural model</td>
<td>Cognitive model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>categorisation model</td>
</tr>
<tr>
<td><strong>Basis of evaluation</strong></td>
<td>Behaviour displayed by person</td>
<td>Prior beliefs and stereotypes about person</td>
</tr>
<tr>
<td><strong>Memory storage</strong></td>
<td>Specific actions</td>
<td>General impressions</td>
</tr>
<tr>
<td><strong>Quality of judgement</strong></td>
<td>Objective</td>
<td>Subjective</td>
</tr>
</tbody>
</table>

## Appendix D

### Table 2.4: Average Correlations from Validity Studies of Within-Exercise Dimension Ratings

<table>
<thead>
<tr>
<th>Authors</th>
<th>Convergent Validity(^a)</th>
<th>Discriminant Validity(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinrichs &amp; Haanpera</td>
<td>0.49</td>
<td>Not reported</td>
</tr>
<tr>
<td>(1976)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sackett &amp; Dreher</td>
<td>0.09</td>
<td>Not reported</td>
</tr>
<tr>
<td>(1984)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archambeau (1979)</td>
<td>0.61</td>
<td>0.89</td>
</tr>
<tr>
<td>Russell (1987)</td>
<td>0.25</td>
<td>0.52</td>
</tr>
<tr>
<td>Baker (1986)</td>
<td>0.26</td>
<td>0.58</td>
</tr>
<tr>
<td>Bycio et al (1987)</td>
<td>0.36</td>
<td>0.75</td>
</tr>
<tr>
<td>Adler &amp; Margolin</td>
<td>0.32</td>
<td>0.82</td>
</tr>
<tr>
<td>(1989)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Correlations of same dimension measured in different exercises

\(^b\)Correlations of different dimensions within an exercise

### Appendix E

#### Table 3.1: Reviews of the Predictive Validity of the Overall Assessment Rating (OAR)

<table>
<thead>
<tr>
<th>Author</th>
<th>Date</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Byham</td>
<td>1970</td>
<td>OAR identifies managers who make progress in rank. Success rate of assessed managers is greater than non-assessed managers. Correlation of OAR and performance ranges form 0.27 to 0.64.</td>
</tr>
<tr>
<td>Cohen et al</td>
<td>1974</td>
<td>Median correlation with performance is 0.33. Median correlation with potential is 0.63. Median correlation with promotion is 0.40.</td>
</tr>
<tr>
<td>Thornton &amp; Byham</td>
<td>1982</td>
<td>OAR predicts variety of criteria, for example, promotions and performance ratings.</td>
</tr>
<tr>
<td>Hunter &amp; Hunter</td>
<td>1984</td>
<td>Statistical analysis estimated validity to be 0.43 in relation to job performance.</td>
</tr>
<tr>
<td>Schmitt et al</td>
<td>1984</td>
<td>Statistical analysis estimated validity to be 0.41 for a variety of criteria.</td>
</tr>
<tr>
<td>Gaugler et al</td>
<td>1987</td>
<td>Statistical analysis estimated validity to be 0.37 in relation to progress, performance and ratings.</td>
</tr>
</tbody>
</table>

### Table 3.2: Evidence of Predictive Accuracy in the Management Progress Study

<table>
<thead>
<tr>
<th>Predicted to Reach Middle Management</th>
<th>Percentage Attaining Middle Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 Years or less</td>
</tr>
<tr>
<td>College sample</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>48%</td>
</tr>
<tr>
<td>No or Question</td>
<td>11%</td>
</tr>
<tr>
<td>Non-college sample</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32%</td>
</tr>
<tr>
<td>No or Question</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Source: Bray & Grant (1966); Bray et al (1974); Howard (1979).*
### Appendix G

#### Table 3.3: Comparison of Assessment Centre Features to a Typical Promotional System

<table>
<thead>
<tr>
<th>Feature</th>
<th>Typical Promotional System</th>
<th>Assessment Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of raters</td>
<td>Immediate manager</td>
<td>Multiple raters</td>
</tr>
<tr>
<td>Raters’ viewpoint</td>
<td>Subjective</td>
<td>Objective</td>
</tr>
<tr>
<td>Raters’ training in observation</td>
<td>Lower</td>
<td>Higher</td>
</tr>
<tr>
<td>Mode of observation</td>
<td>Distracted</td>
<td>Attentive</td>
</tr>
<tr>
<td>Skills observed</td>
<td>Current job</td>
<td>Management simulations</td>
</tr>
<tr>
<td>Yardstick used</td>
<td>Variable</td>
<td>Common</td>
</tr>
</tbody>
</table>

*Source: Kraut (1973, p 181).*
Appendix H

Sales Management Process

### Table 5.1: Cost Analysis of Selection Process for Business Development Managers

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Amount</th>
<th>Sub Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>External vendor</td>
<td></td>
<td>R339 000</td>
</tr>
<tr>
<td>Consulting fees</td>
<td>R264 000</td>
<td></td>
</tr>
<tr>
<td>Test material</td>
<td>R 50 000</td>
<td></td>
</tr>
<tr>
<td>Travelling expenses</td>
<td>R 25 000</td>
<td></td>
</tr>
<tr>
<td>Other travelling expenses</td>
<td></td>
<td>R 30 000</td>
</tr>
<tr>
<td>Conference facilities</td>
<td></td>
<td>R 26 000</td>
</tr>
<tr>
<td>Feedback sessions</td>
<td></td>
<td>R 34 000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>R429 000</td>
</tr>
</tbody>
</table>
Table 5.2: Assessment Programme for Business Development Managers

<table>
<thead>
<tr>
<th>Time</th>
<th>Participant(s)</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08h00 – 08h10</td>
<td>1 – 8</td>
<td>Welcome participants</td>
</tr>
<tr>
<td>08h10 – 09h00</td>
<td>1 – 8</td>
<td>Leaderless group discussion exercise</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In-Basket</th>
<th>Coaching interview simulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation</td>
</tr>
<tr>
<td>1</td>
<td>09h35 – 11h05</td>
</tr>
<tr>
<td>2</td>
<td>09h05 – 09h30</td>
</tr>
<tr>
<td>3</td>
<td>09h05 – 09h55</td>
</tr>
<tr>
<td>4</td>
<td>09h05 – 10h20</td>
</tr>
<tr>
<td>5</td>
<td>09h05 – 10h35</td>
</tr>
<tr>
<td>6</td>
<td>09h05 – 10h35</td>
</tr>
<tr>
<td>7</td>
<td>09h05 – 10h35</td>
</tr>
<tr>
<td>8</td>
<td>09h05 – 10h35</td>
</tr>
</tbody>
</table>

Case study

<table>
<thead>
<tr>
<th></th>
<th>11h15 – 13h15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>10h40 – 11h05</td>
</tr>
<tr>
<td>7</td>
<td>10h40 – 11h30</td>
</tr>
<tr>
<td>8</td>
<td>10h40 – 11h55</td>
</tr>
</tbody>
</table>

Good luck!! ☺☺☺☺
### Table 5.3: Assessment Competencies and Behavioural Indicators Assessed in Written Case Study

<table>
<thead>
<tr>
<th>Competency</th>
<th>Behavioural Indicator</th>
</tr>
</thead>
</table>
| **Business Strategy Skills:** Ability to plan, document, communicate, make operative, sustain and deliver business strategy. | • See importance of competitive advantage.  
• Investigate potential of market place.  
• Implement brand name.  
• Seek information for networking to assist with marketing initiatives.  
• Develop strategy to market products.  
• Identify potential clients.  
• Identify sub-standard products.  
• Re-launch of products.  
• Neutralise competition.  
• Appoint senior personnel in growing business.  
• Approach facts from case study in a realistic manner. |
| **Business Operation Skills:** Ability to communicate knowledge of principles, policies and activities, and guiding business operations on a daily basis. | • Communicate business plan to staff via e-mail or meetings.  
• Consider inputs from staff in decision-making.  
• Develop systems to focus on day-to-day activities, for example, database for leads and scorecard for monitoring purposes.  
• Monitor business processes and results continuously.  
• Base principles on core business principles.  
• Put strategy in place to establish and develop client base.  
• Stage information sessions and road shows emphasising values, products and services of the business.  
• Develop new products to meet clients’ needs.  
• Launch competitions to increase production levels. |
| **Adaptability:** Alters actions willingly in the light of new information and changing situations. | • Willingness to get involved in unfamiliar terrain.  
• Reconsider and adapt own point of view.  
• Adapt all plans to suit needs of the situation.  
• Consider inputs from others.  
• Defend own beliefs |
| **Financial Management Skills:** Ability to plan, document, communicate, make | • Put business plan in place.  
• Demonstrate and understand commercial and financial principles.  
• Main focus needs to be on profit. |
<table>
<thead>
<tr>
<th>Competency</th>
<th>Behavioural Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>operative, sustain and deliver financial strategy.</td>
<td>• View issues in terms of costs, profits, markets and added value.</td>
</tr>
<tr>
<td></td>
<td>• Plan and motivate ideas to control budget overspending.</td>
</tr>
<tr>
<td></td>
<td>• Document decisions.</td>
</tr>
<tr>
<td></td>
<td>• Implement a profit sharing scheme.</td>
</tr>
<tr>
<td></td>
<td>• Explore opportunities for enhancement of profitability.</td>
</tr>
<tr>
<td><strong>Performance Management Skills:</strong> Ability to communicate, foster, drive and deliver the performance objectives of direct reports in relation to business objectives.</td>
<td>• Base priorities on business principles.</td>
</tr>
<tr>
<td></td>
<td>• Set quarterly targets.</td>
</tr>
<tr>
<td></td>
<td>• Drive to achieve goals and strategy.</td>
</tr>
<tr>
<td></td>
<td>• Measure added value.</td>
</tr>
<tr>
<td></td>
<td>• Increase productivity.</td>
</tr>
<tr>
<td></td>
<td>• Identify training and development needs with reference to re-training, and improvement of product knowledge and competencies.</td>
</tr>
<tr>
<td></td>
<td>• Offer practical assistance and support to Advisors in business unit</td>
</tr>
<tr>
<td></td>
<td>• Build team spirit.</td>
</tr>
<tr>
<td></td>
<td>• Suggest new ways to measure production, individually and in team context.</td>
</tr>
<tr>
<td></td>
<td>• Emphasis on follow-up and feedback actions.</td>
</tr>
<tr>
<td></td>
<td>• Communicate business plan to staff and clients.</td>
</tr>
</tbody>
</table>
Table 5.4: Competency Matrix for Business Development Managers

<table>
<thead>
<tr>
<th>Competency</th>
<th>In-Basket</th>
<th>Leaderless Group Discussion</th>
<th>Coaching Interview Simulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership Skills:</strong> Ability to build, maintain, motivate and lead group processes by example.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Coaching Skills:</strong> Ability to foster best practices and encourages performance excellence through communication and pragmatic information.</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Entrepreneurship:</strong> Pro-actively seeks, seizes and acts on commercial opportunities.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Action Orientation:</strong> Translates plans or theory into pragmatic actions and application.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Judgement and Decisiveness:</strong> Exhibits hesitance only in the light of weighing pros and cons objectively, and takes action after considering the facts.</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Assertiveness:</strong> Defends own beliefs, values and opinions despite pressure or opposition.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Self-motivation:</strong> Exhibits reliance to exceed expectations with limited guidance, and uses initiative to continuously produce results.</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Energy:</strong> Energises self and others to act by nature of personal enthusiasm, commitment, optimism and confidence.</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Table 5.5: Assessment Competencies and Behavioural Indicators Assessed in Leaderless Group Discussion, In-basket and Coaching Interview Simulation

<table>
<thead>
<tr>
<th>Competency</th>
<th>Behavioural Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership Skills:</strong></td>
<td>• Communicate expectations to team by creating a purpose.</td>
</tr>
<tr>
<td>Ability to build, maintain,</td>
<td>• Get buy-in and cooperation from team members.</td>
</tr>
<tr>
<td>motivate and lead group</td>
<td>• Involve team members in decision-making activities.</td>
</tr>
<tr>
<td>processes by example.</td>
<td>• Listen to team members and demonstrate effective interpersonal communication skills.</td>
</tr>
<tr>
<td></td>
<td>• Share and communicate relevant information with team.</td>
</tr>
<tr>
<td></td>
<td>• Demonstrate appropriate interpersonal styles.</td>
</tr>
<tr>
<td></td>
<td>• Demonstrate respect for opinions of other people.</td>
</tr>
<tr>
<td></td>
<td>• Provide guidance and support to team in order to achieve their objectives.</td>
</tr>
<tr>
<td></td>
<td>• Motivate team to “walk the extra mile”.</td>
</tr>
<tr>
<td></td>
<td>• Provide recognition and positive reinforcement.</td>
</tr>
<tr>
<td><strong>Coaching Skills:</strong></td>
<td>• Create an environment where others feel free to discuss strengths and weaknesses.</td>
</tr>
<tr>
<td>Ability to foster best</td>
<td>• Be aware of strong points and development areas of team members and deploy accordingly.</td>
</tr>
<tr>
<td>practices and encourages</td>
<td>• Identify development needs.</td>
</tr>
<tr>
<td>performance excellence</td>
<td>• Facilitate the development of solutions for performance improvement.</td>
</tr>
<tr>
<td>through communication and</td>
<td>• Use problems as examples to coach others.</td>
</tr>
<tr>
<td>pragmatic information.</td>
<td>• Give negative performance feedback in a supporting manner.</td>
</tr>
<tr>
<td></td>
<td>• Communicate “best practice”.</td>
</tr>
<tr>
<td></td>
<td>• Make resources available to assist in learning.</td>
</tr>
<tr>
<td><strong>Entrepreneurship:</strong></td>
<td>• Take aspects such as profit, loss and business opportunities into account in decision-</td>
</tr>
<tr>
<td>Proactively seeks,</td>
<td>making processes.</td>
</tr>
<tr>
<td>seizes and acts on</td>
<td>• Deal with issues in a manner that indicates an appreciation for the importance of</td>
</tr>
<tr>
<td>commercial opportunities.</td>
<td>getting new clients.</td>
</tr>
<tr>
<td></td>
<td>• Focus also on maintaining effective relationships with current clients.</td>
</tr>
<tr>
<td><strong>Action Orientation:</strong></td>
<td>• Identify own objectives, as well as for business unit and other role players.</td>
</tr>
<tr>
<td>Translates plans or theory</td>
<td>• Identify and set priorities.</td>
</tr>
<tr>
<td>into pragmatic actions</td>
<td>• Develop action plans, schedule activities and allocate work accordingly.</td>
</tr>
<tr>
<td>and application.</td>
<td>• Set deadlines.</td>
</tr>
<tr>
<td>Competency</td>
<td>Behavioural Indicator</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------</td>
</tr>
<tr>
<td><strong>Competency</strong></td>
<td><strong>Behavioural Indicator</strong></td>
</tr>
<tr>
<td>• Implement feedback mechanisms and monitor progress on performance.</td>
<td>• Demonstrate effective time management.</td>
</tr>
<tr>
<td><strong>Judgement and Decisiveness:</strong> Exhibits hesitance only in the light of weighing up pros and cons objectively, and moves swiftly into action after considering the facts.</td>
<td>• Get ideas from other people and ask questions to gain understanding of problems, issues or situations.</td>
</tr>
<tr>
<td></td>
<td>• Scrutinise information to determine where problems lay.</td>
</tr>
<tr>
<td></td>
<td>• Request additional information.</td>
</tr>
<tr>
<td></td>
<td>• Study information carefully to identify all relevant facts.</td>
</tr>
<tr>
<td></td>
<td>• Identify figures and trends.</td>
</tr>
<tr>
<td></td>
<td>• Discard irrelevant information.</td>
</tr>
<tr>
<td></td>
<td>• Display an understanding of information and documentation.</td>
</tr>
<tr>
<td></td>
<td>• See links between information.</td>
</tr>
<tr>
<td></td>
<td>• Identify bigger picture.</td>
</tr>
<tr>
<td></td>
<td>• Make logical decisions based on relevant information.</td>
</tr>
<tr>
<td></td>
<td>• Consider alternatives.</td>
</tr>
<tr>
<td></td>
<td>• Consider implication of decisions.</td>
</tr>
<tr>
<td></td>
<td>• Do not jump to unconfirmed conclusions.</td>
</tr>
<tr>
<td><strong>Assertiveness:</strong> Stands up for beliefs, values and opinions despite pressure or opposition.</td>
<td>• Communicate the rationale for decisions.</td>
</tr>
<tr>
<td></td>
<td>• Introduce views on specific actions to be taken.</td>
</tr>
<tr>
<td></td>
<td>• State views, decisions and recommendations clearly.</td>
</tr>
<tr>
<td></td>
<td>• Be prepared to make decisions and take risks.</td>
</tr>
<tr>
<td></td>
<td>• Hold independent view.</td>
</tr>
<tr>
<td><strong>Self-motivation:</strong> Exhibits reliance to exceed expectations without much direction, and uses initiative to steadfastly push self for results.</td>
<td>• Make recommendations that clearly go beyond what is expected.</td>
</tr>
<tr>
<td></td>
<td>• Take the leading role in addressing problems and seizing of opportunities.</td>
</tr>
<tr>
<td></td>
<td>• Generate suggestions and solutions.</td>
</tr>
<tr>
<td></td>
<td>• Initiate action when mistakes are identified.</td>
</tr>
<tr>
<td></td>
<td>• Initiate change.</td>
</tr>
<tr>
<td></td>
<td>• Seek opportunities.</td>
</tr>
<tr>
<td></td>
<td>• Take ownership of issues.</td>
</tr>
<tr>
<td></td>
<td>• Display a sense of urgency.</td>
</tr>
<tr>
<td></td>
<td>• Utilise time effectively.</td>
</tr>
<tr>
<td><strong>Energy:</strong> Energises self and others to act due to personal enthusiasm, commitment, optimism &amp; confidence</td>
<td>• Succeed in gaining agreement on recommendations regarding a course of action.</td>
</tr>
<tr>
<td></td>
<td>• Put forward powerful arguments in order to persuade others.</td>
</tr>
<tr>
<td></td>
<td>• Able to present ideas and proposals in an enthusiastic manner.</td>
</tr>
</tbody>
</table>
TO: ALL PROVINCIAL MANAGERS
RE: PURPOSE OF PERFORMANCE EVALUATION INITIATIVE FOR BUSINESS DEVELOPMENT MANAGERS

The training and development of employees in a planned and consistent manner, is essential when working towards achieving a common business unit goal. The attainment of this business unit goal will enable the company as a whole, to achieve its overall business objectives that have been identified and which, in this instance, provides the necessary direction and guidance to all employees.

This performance evaluation tool has been developed to assist you, the Provincial Manager, in the performance enhancement process of your Business Development Managers. After completing the evaluation questionnaire, you will be able to compile an individual development plan for each Business Development Manager in your area. Performance gaps can thus be addressed and measured in future by using the same tool.

Not only will this tool be used for performance enhancement purposes, but also to determine whether the selection instruments, which had been used in the assessment process, were measuring the competencies identified in the job profile. This will enable the Assessment Centre Team to clarify certain uncertainties from a research perspective.

We appreciate your cooperation in this regard and trust this will assist you in managing the performance appraisal process in your business unit.

Regards

Assessment Centre Team
Human Resources
Appendix O-1

STRICTLY CONFIDENTIAL

BUSINESS DEVELOPMENT MANAGER
PERFORMANCE EVALUATION

BDM name : ....................................................
Date : ...........................................................
Region / Location : ..............................................
Provincial Manager reporting to : ..............................

MARK THE APPROPRIATE BLOCK WITH “X” AND COMMENT WHERE NECESSARY.

A FIVE-POINT SCALE IS USED, AND CAN BE INTERPRETED AS FOLLOWS:

<table>
<thead>
<tr>
<th>Competency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much less than acceptable level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequate level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exceeds adequate level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent Exceeds by far adequate level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Entrepreneurship:
   Pro-actively seeks, seizes and acts on commercial opportunities.

2. Performance Management Skills:
   Ability to communicate, foster, drive and deliver the performance objectives of direct reports in relation to business objectives.

3. Leadership Skills:
   Ability to build, maintain, motivate and lead group processes by example.

4. Coaching Skills:
   Ability to foster best practices and encourages performance excellence through communication of pragmatic information.

5. Business Operation Skills:
   Ability to communicate knowledge of principles, policies and activities, and guiding business operations on a daily basis.

6. Business Strategy Skills:
   Ability to plan, document, communicate, make operative, sustain and deliver business strategy.
<table>
<thead>
<tr>
<th>COMPETENCY</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. <strong>Financial Management Skills:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to plan, document, communicate, make</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>operative, sustain and deliver financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strategy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. <strong>Action Orientation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translates plans or theory into pragmatic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>actions and application.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. <strong>Judgement and Decisiveness:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibits hesitance only in the light of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>weighing pros and cons objectively, and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>swiftly takes action after considering the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>facts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. <strong>Assertiveness:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defends own beliefs, values and opinions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>despite pressure or opposition.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. <strong>Adaptability:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alters actions willingly in the light of new</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>information and changing situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. <strong>Self-motivation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibits reliance to exceed expectations with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>limited guidance, and uses initiative to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>continuously produce results.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. <strong>Energy:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energises self and others to act by nature of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>personal enthusiasm, commitment, optimism and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>confidence.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COMMENTS:**

_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
_____________________________________________________________
Business Development Manager: Performance Evaluation

1. **ENTREPRENEURSHIP:**
   Pro-actively seeks, seizes and acts on commercial opportunities.

   - 1 - Much less than acceptable level
   - 2 - Need development
   - 3 - Adequate level
   - 4 - Exceeds adequate level
   - 5 - Excellent, exceeds by far adequate level

2. **PERFORMANCE MANAGEMENT SKILLS:**
   Ability to communicate, foster, drive and deliver the performance objectives of direct reports in relation to business objectives.

   - 1 - Much less than acceptable level
   - 2 - Need development
   - 3 - Adequate level
   - 4 - Exceeds adequate level
   - 5 - Excellent, exceeds by far adequate level

3. **LEADERSHIP SKILLS:**
   Ability to build, maintain, motivate and lead group processes by example.

   - 1 - Much less than acceptable level
   - 2 - Need development
   - 3 - Adequate level
   - 4 - Exceeds adequate level
   - 5 - Excellent, exceeds by far adequate level
4. **COACHING SKILLS:**
   Ability to foster best practices and encourages performance excellence through communication of pragmatic information
   
   - 1 - Much less than acceptable level
   - 2 - Need development
   - 3 - Adequate level
   - 4 - Exceeds adequate level
   - 5 - Excellent, exceeds by far adequate level

5. **BUSINESS OPERATION SKILLS:**
   Ability to communicate knowledge of principles, policies and activities, and guiding business operations on a daily basis.
   
   - 1 - Much less than acceptable level
   - 2 - Need development
   - 3 - Adequate level
   - 4 - Exceeds adequate level
   - 5 - Excellent, exceeds by far adequate level

6. **BUSINESS STRATEGY SKILLS:**
   Ability to plan, document, communicate, make operative, sustain and deliver business strategy.
   
   - 1 - Much less than acceptable level
   - 2 - Need development
   - 3 - Adequate level
   - 4 - Exceeds adequate level
   - 5 - Excellent, exceeds by far adequate level
7. FINANCIAL MANAGEMENT SKILLS:
   Ability to plan, document, communicate, make operative, sustain and deliver financial strategy.
   1 - Much less than acceptable level
   2 - Need development
   3 - Adequate level
   4 - Exceeds adequate level
   5 - Excellent, exceeds by far adequate level

8. ACTION ORIENTATION:
   Translates plans or theory into specific actions and application.
   1 - Much less than acceptable level
   2 - Need development
   3 - Adequate level
   4 - Exceeds adequate level
   5 - Excellent, exceeds by far adequate level

9. JUDGEMENT AND DECISIVENESS:
   Exhibits hesitance only in the light of weighing pros and cons objectively, and takes action after considering the facts.
   1 - Much less than acceptable level
   2 - Need development
   3 - Adequate level
   4 - Exceeds adequate level
   5 - Excellent, exceeds by far adequate level
10. ASSERTIVENESS:
Defends own beliefs, values and opinions despite pressure or opposition.
☐ 1 - Much less than acceptable level
☐ 2 - Need development
☐ 3 - Adequate level
☐ 4 - Exceeds adequate level
☐ 5 - Excellent, exceeds by far adequate level

11. ADAPTABILITY:
Alters actions willingly in the light of new information and changing situations.
☐ 1 - Much less than acceptable level
☐ 2 - Need development
☐ 3 - Adequate level
☐ 4 - Exceeds adequate level
☐ 5 - Excellent, exceeds by far adequate level

12. SELF-MOTIVATION:
Exhibits reliance to exceed expectations with limited guidance, and uses initiative to continuously produce results.
☐ 1 - Much less than acceptable level
☐ 2 - Need development
☐ 3 - Adequate level
☐ 4 - Exceeds adequate level
☐ 5 - Excellent, exceeds by far adequate level
13. ENERGY:

Energises self and others to act by nature of personal enthusiasm, commitment, optimism and confidence.

- 1 - Much less than acceptable level
- 2 - Need development
- 3 - Adequate level
- 4 - Exceeds adequate level
- 5 - Excellent, exceeds by far adequate level
REFERENCES


*Psychological Bulletin*, vol. 56, pp 81-105.


*Psychological Bulletin*, vol. 52, pp 281-302.


