

# Contents

<i>List of Tables and Figures</i>	ix
<i>Preface</i>	xi
<i>Acknowledgements</i>	xii

## **PART I PREPARATION**

<b>1 Introduction and Ethical Issues</b>	<b>3</b>
The context of selection	3
The essentials of a selection system	3
Ethical issues in selection and assessment	7
<b>2 Job Analysis</b>	<b>14</b>
The many uses of job descriptions	14
Methods of job analysis	15
More involved approaches to job analysis	19
Agreement and restructuring	27
Theoretical aspects of job analysis	28
<b>3 Criteria</b>	<b>35</b>
Importance of criteria	36
Levels of criteria	36
Types of criteria	38
Theoretical requirements of criteria	53
<b>4 Personnel Specifications</b>	<b>60</b>
Straightforward approaches to personnel specifications	60
More complex methods of producing personnel specifications	63
Theoretical issues	71
<b>5 Dealing with Candidates</b>	<b>74</b>
Attracting a field of candidates	74
Recruitment media	74

Methods of application	81
Application forms	81
Curriculum vitae	82
Producing a shortlist	84
Theoretical issues in attracting a field of applicants	85
Some unanswered questions	88

## **PART II PSYCHOMETRICS**

<b>6 Requirements of Measures: Practicability, Sensitivity and Reliability</b>	<b>93</b>
Practicability of measures	93
Criterion-based scoring systems	95
Norm-based scoring systems	97
Reliability	102
Item response theory and latent trait theory	111
<b>7 Requirements of Measures: Validity and Meta-analysis</b>	<b>117</b>
Definitions of validity	117
Types of validity	118
Evaluating validity coefficients	128
The relationship between reliability and validity	132
Validity generalisation	133
Meta-analysis and validity generalisation	136
<b>8 Bias in Selection</b>	<b>146</b>
Discrimination and types of bias	146
Legal aspects of bias in selection	155
Checking the potential bias of selection devices	155
Affirmative action plans	156
Wider aspects of affirmative action	157

## **PART III SELECTION METHODS**

<b>9 Psychological Tests</b>	<b>161</b>
Definition of psychological tests	161
Categories of psychological test	162

Specific psychological tests	167
Outline of test construction	179
Administrative aspects of test	182
Tailored testing	189
<b>10 Traditional Selection Procedures</b>	<b>196</b>
Interviews	196
References	210
<b>11 Modern Selection Procedures</b>	<b>213</b>
Work sample tests	213
Assessment centres	225
Biographical data (biodata)	232
<b>12 Other Selection Methods</b>	<b>239</b>
Self-assessment	239
Peer evaluation	242
Graphology	243
Astrology	247
Honesty tests	250
Accomplishment records	251
Future autobiographies	251
 <b>PART IV EVALUATION</b>	
<b>13 Making a Decision and Estimating the Value of Selection</b>	<b>255</b>
Clinical versus actuarial	255
Actuarial approaches	255
Multiple vacancies for one job	258
Multiple vacancies for several jobs	261
Estimating the monetary value of selection	261
Advanced methods of calculating monetary value	265
<b>14 The Impact of Assessment, Selection and Feedback on Candidates</b>	<b>275</b>
Impact on candidates	275
Feedback to candidates	277

<i>Appendix I Ordinates of the Normal Curve</i>	283
<i>Appendix II Standard Errors for Various Levels of Reliability</i>	284
<i>Appendix III Expectancy Tables</i>	285
<i>Appendix IV Some Useful Formulae</i>	289
<i>Bibliography</i>	294
<i>Index</i>	323

# List of Tables and Figures

## Tables

1.1	The use of various methods of selection in six countries	6
3.1	Some production indices used as criteria	39
3.2	Some personnel indices used as a criteria	41
3.3	Some ways of collecting judgemental data	46
5.1	Applicants' use of, and success with, recruitment data	88
6.1	Sensitivity of five measures in selection	97
6.2	Interpretation of reliability coefficients	104
7.1	Demonstration of the effects of restriction of range and attenuation of criteria	122
7.2	Hypothetical loadings for interview scores	127
7.3	Correlations between general mental ability test score and work performance in eight different studies	137

## Figures

1.1	The stages of systematic selection	5
1.2	Organisational Psychology Paradigm	7
2.1	Contents of job description	16
2.2	Example of job description	18
2.3	Advantages and disadvantages of nine methods of job analysis	20
2.4	Fine's functional job analysis	22
2.5	Two examples of benchmarked scales similar to those used by McCormick	26
2.6	A schematic analysis of job analysis	29
3.1	Improved rating scales	48
3.2	An example of a behaviourally-anchored rating scale	49
3.3	Hypothetical reliabilities of sales figures based on different time periods	55
4.1	Rodger's seven-point plan	61
4.2	Example of a personnel specification	62
4.3	Abbreviated aptitude profile for the job of setter	64
4.4	Schematic representation of Vernon's model of intelligence	66

4.5	Some interest and personal values categories	70
5.1	Guidelines for producing newspaper advertisements	79
5.2	Checklist for constructing an application form	82
5.3	Checklist for contents of application forms	83
5.4	Use of, and satisfaction with, recruitment media	89
6.1	Main costs in a selection system	95
6.2	Normal curve showing height of a sample of 36 women	100
6.3	Two examples of a normal curve showing how mean and standard deviation may vary	100
6.4	Basic item analysis for a hypothetical test of short-term memory	113
6.5	Item analysis for a hypothetical item in a test of short-term memory	114
7.1	Example of a scattergram between a predictor (in this case a test) and a criterion	120
7.2	Statistical power and type II error	140
7.3	Meta-analysis formulae	142
7.4	A worked example of a bare-bones meta-analysis	143
8.1	Bias in selection using quadrant analysis	152
9.1	Some tests of mental ability	171
9.2	Correct method of drawing psychometric profiles	188
11.1	Work sampling and 'traditional' approaches	214
11.2	Selected contents from a departmental manager's in-tray exercise	218
11.3	Bricklaying trainability test	222
11.4	Dimensions assessed by two assessment centre exercises	227
11.5	The flow of assessment centre information	228
11.6	Some of the factors moderating the validity of assessment centres	231
13.1	Complications in profile matching	259
13.2	Relating predictors to performance using a scattergram	260
13.3	CPOAT grades and efficiency of selection	263
13.4	Ghiselli-Brown nomograph for estimating improvement in productivity from selection	266
13.5	Selection at random	268
13.6	Perfect selection	269