

https://dspace.org/

Retention factors influencing South African IT professionals in the financial services sector

Shepperson, Glenda Lyn

2013-10-04
http://hdl.handle.net/10539/13192

Downloaded from a DSpace repository. https://dspace.org/

Retention factors influencing South African IT professionals in the financial services sector

Glenda Lyn Shepperson

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, 2013

ABSTRACT

The current Information Technology (IT) skills shortage in South Africa is critical, resulting in a war for talent, which organisations cannot afford to lose if they are to remain competitive. In order to secure their scarce resources they need to focus on the retention of their IT professional workforce.

The primary aim and purpose of this research study was to identify the most important retention factors that IT professionals in the South African financial services sector perceived to influence their decision on whether to stay with an organisation or not.

Data was collected by means of an online questionnaire from 259 IT professionals in the South African financial services sector. The data was analysed in conjunction with data from other similar studies in order to draw appropriate comparisons.

This research has indicated that in the quest to retain their IT professionals, organisations needs to consider the tangible, as well as intangible aspects important to their employees. These include most importantly, the provision of work-life balance programmes and practices.

The statistical analysis conducted as part of this study in order to determine which variables influencing the IT professionals' decisions to remain with an organisation could be grouped meaningfully into themes, resulted in the identification of the following six themes, listed in order of importance:

- Traditional employment provisions;
- Inspiring, supportive, learning culture;
- Constructive teamwork;
- Liberating, enabling and rewarding personal work experience;
- Freedom to determine personal and organisational destiny; and
- Adequate provision to enable optimal performance.

DECLARATION

I, Glenda Lyn Shepperson, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Glenda Lyn Shepperson

Signed at Sandton

On the 28th day of March 2013

DEDICATION

To

Mom and Dad

with love and gratitude

and to

Stormy

thank you for all the joy you gave me

I miss you so much!

ACKNOWLEDGEMENTS

My Lord Jesus for walking this difficult path with me and providing me with the strength to finish.

Conrad Viedge for your patience and commitment to assisting me to finish on time.

Anthony Stacey for the statistics assistance provided.

Mom and Dad, for your unwavering faith in my abilities and your constant love and encouragement.

Family and friends for your confidence in my ability to finish when I didn't think I would, especially Marie, Anton, Petra, DJ and Ant.

Michael Gaylard for allowing me to replicate his study.

Discovery for financing my studies and the management team for their support and allowing me to gather research data from their staff.

The University of the Witwatersrand and the Wits Business School for the use of their resources.

Lastly, thank you to everyone who assisted in distributing the survey link and to all of you who took the time to fill in the questionnaire

… this research would not have been possible without all of you.

TABLE OF CONTENTS

ABSTRACT ..... **II**

DEDICATION ..... **IV**

ACKNOWLEDGEMENTS ..... **V**

LIST OF TABLES ..... **XII**

LIST OF FIGURES ..... **XX**

CHAPTER 1: INTRODUCTION **1**

1.1 PURPOSE OF THE STUDY 1
1.2 CONTEXT OF THE STUDY 1
1.3 PROBLEM STATEMENT 6
1.3.1 MAIN PROBLEM 6
1.4 SIGNIFICANCE OF THE STUDY 6
1.5 DELIMITATIONS OF THE STUDY 8
1.6 DEFINITION OF TERMS 9
1.7 ASSUMPTIONS 11

CHAPTER 2: LITERATURE REVIEW **12**

2.1 INTRODUCTION 12
2.2 THE IT PROFESSIONAL AS KNOWLEDGE WORKER 16
2.2.1 THE KNOWLEDGE WORKER 16
2.2.2 THE IT PROFESSIONAL 17
2.3 VARIABLES INFLUENCING STAFF RETENTION AND TURNOVER 18
2.3.1 RECRUITMENT PROCESS 18
2.3.2 ENVIRONMENT 20
2.3.3 RETURNS (REWARD AND RECOGNITION) 25
2.3.4 SUPERVISION 29
2.3.5 ENRICHMENT (EMPLOYABILITY AND PERSONAL GROWTH) 33
2.3.6 FEEDBACK (COMMUNICATION AND INVOLVEMENT) 35
2.3.7 ORGANISATIONAL CAREER PROSPECTS 37
2.3.8 STAY ATTITUDES 39
2.3.9 LEAVE ATTITUDES 47
2.3.10 EXTERNAL INFLUENCES 52
2.4 CONCLUSION OF LITERATURE REVIEW 54
2.4.1 RESEARCH PROPOSITION 1 61
2.4.2 RESEARCH PROPOSITION 2 61
2.4.3 RESEARCH PROPOSITION 3 62
2.4.4 RESEARCH PROPOSITION 4 62
2.4.5 RESEARCH PROPOSITION 5 63

CHAPTER 3: RESEARCH METHODOLOGY 64

3.1 INTRODUCTION 64
3.2 RESEARCH METHODOLOGY /PARADIGM 65
3.3 RESEARCH DESIGN 66
3.4 POPULATION AND SAMPLE 69
3.4.1 POPULATION 69
3.4.2 SAMPLE AND SAMPLING METHOD 69
3.5 THE RESEARCH INSTRUMENT 73
3.5.1 SELECTION OF THE RESEARCH INSTRUMENT 73
3.5.2 CONSTRUCTION OF THE QUESTIONNAIRE 74
3.6 PROCEDURE FOR DATA COLLECTION 84
3.7 DATA ANALYSIS AND INTERPRETATION 86
3.7.1 ANALYSIS OF RESEARCH PROPOSITION 1 88
3.7.2 ANALYSIS OF RESEARCH PROPOSITION 2 89
3.7.3 ANALYSIS OF RESEARCH PROPOSITION 3 91
3.7.4 ANALYSIS OF RESEARCH PROPOSITION 4 94
3.7.5 ANALYSIS OF RESEARCH PROPOSITION 5 99
3.8 LIMITATIONS OF THE STUDY 103
3.9 VALIDITY AND RELIABILITY 103
3.9.1 EXTERNAL VALIDITY 104
3.9.2 INTERNAL VALIDITY 106
3.9.3 RELIABILITY 111

CHAPTER 4: PRESENTATION OF RESULTS 115

4.1 INTRODUCTION 115
4.2 DEMOGRAPHIC PROFILE OF RESPONDENTS 115
4.2.1 CURRENT EMPLOYER 118
4.2.2 RACE OF RESPONDENT 119
4.2.3 GENDER OF RESPONDENT 120
4.2.4 AGE OF RESPONDENT 121
4.2.5 NUMBER OF EMPLOYEES IN CURRENT ORGANISATION 122
4.2.6 YEARS OF SERVICE WITH CURRENT ORGANISATION 123
4.2.7 HIGHEST UNIVERSITY OR EQUIVALENT QUALIFICATION 124
4.2.8 CURRENT LEVEL OF EXPERTISE 125
4.2.9 JOB SATISFACTION LEVEL 126
4.2.10 INTENTION TO LEAVE CURRENT ORGANISATION 127
4.3 RESCALING OF THE DATA 127
4.4 RESULTS PERTAINING TO RESEARCH PROPOSITION 1 128
4.4.1 COMPARISON TO THE GAYLARD RESULTS 132
4.4.2 RESEARCH PROPOSITION 1 SUMMARY 137
4.5 RESULTS PERTAINING TO RESEARCH PROPOSITION 2 138
4.5.1 COMPARISON TO THE GAYLARD RESULTS 141
4.5.2 RESEARCH PROPOSITION 2 SUMMARY 148
4.6 RESULTS PERTAINING TO RESEARCH PROPOSITION 3 150
4.6.1 THE THREE-FACTOR SOLUTION 151
4.6.2 INTERNAL CONSISTENCY OF THE THREE-FACTOR SOLUTION 158
4.6.3 THE SIX-FACTOR SOLUTION 159
4.6.4 INTERNAL CONSISTENCY OF THE SIX-FACTOR SOLUTIONS 170
4.6.5 COMPARISON TO THE REANALYSED GAYLARD SIX-FACTOR SOLUTION 171

4.6.6 Research Proposition 3 summary 185
4.7 Results pertaining to Research Proposition 4 186
4.7.1 Nominal demographic variables 188
4.7.2 Ordinal demographic variables 192
4.7.3 Comparison to the Gaylard results 193
4.7.4 Research Proposition 4 summary 194
4.8 Results pertaining to Research Proposition 5 195
4.8.1 Comparison to the Gaylard results 202
4.8.2 Research Proposition 5 summary 207
4.9 Summary of the results 209
4.9.1 Research Proposition 1 209
4.9.2 Research Proposition 2 209
4.9.3 Research Proposition 3 210
4.9.4 Research Proposition 4 213
4.9.5 Research Proposition 5 213

CHAPTER 5: DISCUSSION OF THE RESULTS 216

5.1 Introduction 216
5.2 Demographic profile of respondents 216
5.2.1 Current employer 217
5.2.2 Race 217
5.2.3 Gender 217
5.2.4 Age 218
5.2.5 Number of employees in current organisation 220
5.2.6 Years of service with current organisation 220
5.2.7 Highest university or equivalent qualification obtained 221
5.2.8 Current level of expertise 221
5.2.9 Job satisfaction level 222
5.2.10 Intention to leave 222
5.2.11 Profile of the representative respondent 223
5.3 Discussion pertaining to Research Proposition 1 223
5.3.1 Sufficient, flexible down-time 226
5.3.2 Commensurate remuneration 227
5.3.3 Accessibility to appropriate tools 228
5.3.4 Open, respectful relationship with direct management 229
5.3.5 Summary of interpretation 230
5.3.6 Restatement of Research Proposition 1 231
5.4 Discussion pertaining to Research Proposition 2 231
5.4.1 Job environment and requirements 236
5.4.2 Social interaction 236
5.4.3 Project and teamwork 237
5.4.4 Summary of interpretation 237
5.4.5 Restatement of Research Proposition 2 238
5.5 Discussion pertaining to Research Proposition 3 238
5.5.1 Reward 241
5.5.2 Motivation to stay 243
5.5.3 Enabling performance 245
5.5.4 Culture/environment 247
5.5.5 Traditional benefits 248
5.5.6 Teamwork and play 250
5.5.7 Summary of interpretation 251
5.5.8 Restatement of Research Proposition 3 252
5.6 Discussion pertaining to Research Proposition 4 252

5.7 DISCUSSION PERTAINING TO RESEARCH PROPOSITION 5 255
5.8 CONCLUSION 259

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS 262

6.1 INTRODUCTION 262
6.2 CONCLUSIONS OF THE STUDY 262
6.3 RECOMMENDATIONS 267
6.3.1 RECOMMENDATIONS TO HR PRACTITIONERS 267
6.3.2 RECOMMENDATIONS TO MANAGERS OF IT PROFESSIONALS 269
6.3.3 RECOMMENDATIONS TO EDUCATORS (AT SCHOOLS AND TERTIARY INSTITUTIONS) .. 271
6.3.4 RECOMMENDATIONS TO IT PROFESSIONALS THEMSELVES 272
6.4 SUGGESTIONS FOR FURTHER RESEARCH 273

REFERENCES 275

APPENDIX A 287

COVERING LETTER TO RESPONDENTS 287

APPENDIX B 289

RESEARCH INSTRUMENT – FINALISED QUESTIONNAIRE 289

APPENDIX C 301

RANKED VARIABLES ACCORDING TO MEAN FOR THE FIRST SET OF STATEMENTS: VARIABLES THAT INFLUENCE RESPONDENTS' DECISION TO REMAIN WITH THE CURRENT ORGANISATION 301

APPENDIX D 308

COMPARISON OF STATEMENT MEANS AND RANKINGS BETWEEN THE CURRENT RESEARCH AND THE REANALYSED GAYLARD (2004) RESULTS FOR THE FIRST SET OF STATEMENTS 308

APPENDIX E 311

INITIAL FACTOR ANALYSIS 311

APPENDIX F 313

PARALLEL ANALYSIS 313

APPENDIX G 314

THREE-FACTOR SOLUTION – TOTAL VARIANCE EXPLAINED 314

APPENDIX H 316

THREE-FACTOR SOLUTION – FACTOR DETAILS 316
THREE-FACTOR SOLUTION - FACTOR 1 316
THREE-FACTOR SOLUTION - FACTOR 2 319
THREE-FACTOR SOLUTION - FACTOR 3 321

APPENDIX I 323

SIX-FACTOR SOLUTION – TOTAL VARIANCE EXPLAINED 323

APPENDIX J 325

SIX-FACTOR SOLUTION – FACTOR DETAILS 325
SIX-FACTOR SOLUTION - FACTOR 1 325
GAYLARD'S ORIGINAL FACTOR 1 (GAYLARD, 2004, PP. 93-94) 327
SIX-FACTOR SOLUTION - FACTOR 2 328
GAYLARD'S ORIGINAL FACTOR 2 (GAYLARD, 2004, P. 95) 329
SIX-FACTOR SOLUTION - FACTOR 3 330
GAYLARD'S ORIGINAL FACTOR 3 (GAYLARD, 2004, P. 96) 331
SIX-FACTOR SOLUTION - FACTOR 4 332
GAYLARD'S ORIGINAL FACTOR 4 (GAYLARD, 2004, P. 98) 333
SIX-FACTOR SOLUTION - FACTOR 5 333
GAYLARD'S ORIGINAL FACTOR 5 (GAYLARD, 2004, P. 99) 334
SIX-FACTOR SOLUTION - FACTOR 6 335
GAYLARD'S ORIGINAL FACTOR 6 (GAYLARD, 2004, P. 100) 336

APPENDIX K 337

GAYLARD'S (2004) SIX-FACTOR SOLUTION REANALYSED – TOTAL VARIANCE EXPLAINED 337

APPENDIX L 339

GAYLARD'S (2004) SIX-FACTOR SOLUTION REANALYSED – FACTOR DETAILS 339
GAYLARD'S (2004) REANALYSED FACTOR 1 339
GAYLARD'S (2004) REANALYSED FACTOR 2 341
GAYLARD'S (2004) REANALYSED FACTOR 3 343
GAYLARD'S (2004) REANALYSED FACTOR 4 344
GAYLARD'S (2004) REANALYSED FACTOR 5 345
GAYLARD'S (2004) REANALYSED FACTOR 6 345

APPENDIX M 347

CROSS-TABULATION AND CHI^2 REPORTS 347
CURRENT EMPLOYER : INTENTION TO LEAVE 347
RACE : INTENTION TO LEAVE 350
GENDER : INTENTION TO LEAVE 352

AGE RECODED : INTENTION TO LEAVE 353

APPENDIX N 354

DATA RECODING AND SPEARMAN'S CORRELATION REPORTS 354
AGE : INTENTION TO LEAVE 354
NUMBER OF EMPLOYEES : INTENTION TO LEAVE 355
YEARS OF SERVICE : INTENTION TO LEAVE 356
HIGHEST QUALIFICATION : INTENTION TO LEAVE 357
LEVEL OF EXPERTISE : INTENTION TO LEAVE 358
JOB SATISFACTION : INTENTION TO LEAVE 359

APPENDIX O 360

RANKED VARIABLES ACCORDING TO MEAN FOR THE SECOND SET OF STATEMENTS: VARIABLES THAT ARE SATISFIED WITHIN THE RESPONDENTS' CURRENT ORGANISATION 360

APPENDIX P 368

COMPARISON OF STATEMENT MEANS AND RANKINGS BETWEEN THE CURRENT RESEARCH AND THE REANALYSED GAYLARD (2004) RESULTS FOR THE SECOND SET OF STATEMENTS 368

APPENDIX Q 371

FULL GAP ANALYSIS 371

LIST OF TABLES

Table 1: Acronyms 9

Table 2: Financial services organisations targeted 70

Table 3: Sample size and expected versus actual returns 73

Table 4: Analysis of the Gaylard questionnaire (Gaylard, 2004) 78

Table 5: Verbal anchoring of the strength of the Spearman's rank correlation coefficient 98

Table 6: Recoding of age variable from ordinal to nominal 98

Table 7: Summary response rate 116

Table 8: Response rates of the Discovery Group of companies in the survey 119

Table 9: The 10 most influential retention statements according to mean 130

Table 10: Gaylard (2004) data reanalysed - The 10 most influential retention statements according to mean 133

Table 11: Gaylard data reanalysed – Mapping of the original top 10 statements to the reanalysed top 10 statements (Gaylard, 2004, p. 86) .. 135

Table 12: Common themes found to be important in both studies 137

Table 13: The 10 least influential retention statements according to mean 140

Table 14: Gaylard (2004) data reanalysed - The 10 least influential retention statements according to mean 143

Table 15: Gaylard data reanalysed - Mapping of the original bottom 10 statements (Gaylard, 2004, pp. 88-89) to the reanalysed bottom 10 statements 145

Table 16: Percentage variance accounted for by each factor (three-factor solution) 151

Table 17: The statements associated with Factor 1 (three-factor solution) 152

Table 18: The statements associated with Factor 2 (three-factor solution) 154

Table 19: The statements associated with Factor 3 (three-factor solution) 156

Table 20: Ranked Cronbach's Alpha for each of the three factors (three-factor solution) 159

Table 21: Percentage variance accounted for by each factor (six-factor solution) 160

Table 22: The statements associated with Factor 1 (six-factor solution) 161

Table 23: The statements associated with Factor 2 (six-factor solution) 163

Table 24: The statements associated with Factor 3 (six-factor solution) 165

Table 25: The statements associated with Factor 4 (six-factor solution) 166

Table 26: The statements associated with Factor 5 (six-factor solution) 167

Table 27: The statements associated with Factor 6 (six-factor solution) 168

Table 28: Ranked Cronbach's Alpha for each of the six factors (six-factor solution) 171

Table 29: Percentage variance accounted for by each factor (Gaylard's (2004) reanalysed six-factor solution) 172

Table 30: The statements associated with Factor 1 (Gaylard's (2004) reanalysed six-factor solution) 173

Table 31: The statements associated with Factor 2 (Gaylard's (2004) reanalysed six-factor solution) 175

Table 32: The statements associated with Factor 3 (Gaylard's (2004) reanalysed six-factor solution) 177

Table 33: The statements associated with Factor 4 (Gaylard's (2004) reanalysed six-factor solution) 178

Table 34: The statements associated with Factor 5 (Gaylard's (2004) reanalysed six-factor solution) 179

Table 35: The statements associated with Factor 6 (Gaylard's (2004) reanalysed six-factor solution) 180

Table 36: Overall Cronbach's Alpha – Gaylard (2004) comparison 183

Table 37: Ranked Cronbach's Alpha for each of the six factors (six-factor solution) – Gaylard (2004) comparison 183

Table 38: Summary of broad themes and corresponding factors – six-factor solution 186

Table 39: Demographic variables and their corresponding level of measurement 187

Table 40: Relationship between the nominal demographic variables and 'intention to leave' 189

Table 41: Recoding of current employer variable into merged categories 190

Table 42: Recoding of race variable into merged categories 191

Table 43: Recoded relationship between the nominal demographic variables and 'Intention to leave' 191

Table 44: Relationship between the ordinal demographic variables and 'intention to leave' 193

Table 45: Chi^2 p-values for both questions 196

Table 46: Chi^2 p-values for both questions for the reanalysed Gaylard (2004) data 202

Table 47: Summary of broad themes and corresponding factors 212

Table 48: Age mapping to the Gaylard study (2004) 219

Table 49: Top ten ranked statements and the corresponding theme mapping 225

Table 50: Bottom 10 ranked statements and the corresponding theme mapping 233

Table 51: Comparative importance of traditional retention variables in both surveys 234

Table 52: Summary of broad themes and corresponding factors – three-factor solution and six-factor solution (both studies) 240

Table 53: Summary of factors pertaining to broad theme: reward 241

Table 54: Summary of factors pertaining to broad theme: motivation to stay 243

Table 55: Summary of factors pertaining to broad theme: enabling performance 245

Table 56: Summary of factors pertaining to broad theme: culture/environment 247

Table 57: Summary of factors pertaining to broad theme: traditional benefits 248

Table 58: Summary of factors pertaining to broad theme: teamwork and play 250

Table 59: Comparison of biggest differences 257

Table 60: Comparison of smallest differences 258

Table 61: Finalised questionnaire 289

Table 62: First set of statements analysed using Stacey's (2005) distribution fitting approach 301

Table 63: Gaylard's (2004) first set of statements reanalysed using Stacey's (2005) distribution fitting approach 305

Table 64: Comparison of ranked means (current research versus Gaylard (2004)) – Variables that influence respondents' retention decision 308

Table 65: Principal axis factoring – total variance explained for the initial solution 311

Table 66: Principal axis factoring – total variance explained for the 3-factor solution 314

Table 67: Factor 1 – Three-factor solution 316

Table 68: Factor 2 – Three-factor solution 319

Table 69: Factor 3 – Three-factor solution 321

Table 70: Principal axis factoring – total variance explained for the 6-factor solution 323

Table 71: Factor 1 – Six-factor solution 325

Table 72: Factor 1 – Gaylard's original six-factor solution (2004, pp. 93-94) 327

Table 73: Factor 2 – Six-factor solution 328

Table 74: Factor 2 – Gaylard's original six-factor solution (2004, p. 95) . 329

Table 75: Factor 3 – Six-factor solution 330

Table 76: Factor 3 – Gaylard's original six-factor solution (2004, p. 96) . 331

Table 77: Factor 4 – Six-factor solution 332

Table 78: Factor 4 – Gaylard's original six-factor solution (2004, p. 98) . 333

Table 79: Factor 5 – Six-factor solution 333

Table 80: Factor 5 – Gaylard's original six-factor solution (2004, p. 99) . 334

Table 81: Factor 6 – Six-factor solution 335

Table 82: Factor 6 – Gaylard's original six-factor solution (2004, p. 100) 336

Table 83: Principal axis factoring – total variance explained for Gaylard's (2004) reanalysed 6-factor solution 337

Table 84: Factor 1 – Gaylard's (2004) reanalysed 6-factor solution 339

Table 85: Factor 2 – Gaylard's (2004) reanalysed 6-factor solution 341

Table 86: Factor 3 – Gaylard's (2004) reanalysed 6-factor solution 343

Table 87: Factor 4 – Gaylard's (2004) reanalysed 6-factor solution 344

Table 88: Factor 5 – Gaylard's (2004) reanalysed 6-factor solution 345

Table 89: Factor 6 – Gaylard's (2004) reanalysed 6-factor solution 345

Table 90: Cross tabulation – Current employer versus Intention to leave 347

Table 91: Chi^2 tests report – Current employer versus Intention to leave 348

Table 92: Cross tabulation – Current employer recoded versus Intention to leave 349

Table 93: Chi^2 tests report – Current employer recoded versus Intention to leave 349

Table 94: Cross tabulation – Race versus Intention to leave 350

Table 95: Chi^2 tests report – Race versus Intention to leave 350

Table 96: Cross tabulation – Race_recoded versus Intention to leave ... 351

Table 97: Chi^2 tests report – Race_recoded versus Intention to leave.... 351

Table 98: Cross tabulation – Gender versus Intention to leave 352

Table 99: Chi^2 tests report – Gender versus Intention to leave 352

Table 100: Cross tabulation – Age (recoded) versus Intention to leave . 353

Table 101: Chi^2 tests report – Age (recoded) versus Intention to leave .. 353

Table 102: Data recoding – Age versus Intention to leave 354

Table 103: Spearman correlations – Age versus Intention to leave 354

Table 104: Data recoding – Number of employees versus Intention to leave 355

Table 105: Spearman correlations – Number of employees versus Intention to leave..... 355

Table 106: Data recoding – Years of service versus Intention to leave .. 356

Table 107: Spearman correlations – Years of service versus Intention to leave 356

Table 108: Data recoding – Highest qualification versus Intention to leave 357

Table 109: Spearman correlations – Highest qualification versus Intention to leave..... 357

Table 110: Data recoding – Level of expertise versus Intention to leave 358

Table 111: Spearman correlations – Level of expertise versus Intention to leave 358

Table 112: Data recoding – Job satisfaction versus Intention to leave ... 359

Table 113: Spearman correlations – Job satisfaction versus Intention to leave 359

Table 114: Second set of statements analysed using Stacey's (2005) distribution fitting approach 360

Table 115: Gaylard's (2004) second set of statements reanalysed using Stacey's (2005) distribution fitting approach 364

Table 116: Comparison of ranked means (current research versus Gaylard (2004)) – Variables satisfied in current organisation 368

Table 117: High importance, highly satisfied 371

Table 118: High importance, low satisfaction 372

Table 119: Low importance, low satisfaction 373

Table 120: Low importance, highly satisfied 374

Table 121: High importance, highly satisfied (Gaylard (2004) data) 376

Table 122: High importance, low satisfaction (Gaylard (2004) data) 377

Table 123: Low importance, low satisfaction (Gaylard (2004) data) 378

Table 124: Low importance, highly satisfied (Gaylard (2004) data) 379

LIST OF FIGURES

Figure 1: Reasons for global labour shortages in 2006 (Corporate Leadership Council, 2006b, p. 3) 2

Figure 2: Importance of attraction and commitment attribute categories (Corporate Leadership Council, 2006b, p. 35) 39

Figure 3: Corporate Leadership Council's framework of engagement (Corporate Leadership Council, 2004, p. 5) 41

Figure 4: Corporate Leadership Council's EVP (Corporate Leadership Council, 2006a, p. 6) 45

Figure 5: Core and developed economies' EVP Attributes (Corporate Leadership Council, 2006a, p. 9) 46

Figure 6: Discretionary effort (Bohannon, 2008) 49

Figure 7: Intent to stay (Bohannon, 2008) 49

Figure 8: Maximum impact of commitment on the probability of departure (Corporate Leadership Council, 2004, p. 29) 51

Figure 9: Interpretation of the Gaylard questionnaire design method (Gaylard, 2004) 77

Figure 10: Method for interpretation of the differences 101

Figure 11: Distribution of respondents by current employer 118

Figure 12: Distribution of respondents by race 119

Figure 13: Distribution of respondents by gender 120

Figure 14: Distribution of respondents by age 121

Figure 15: Distribution of respondents by number of employees in current organisation..... 122

Figure 16: Distribution of respondents by years of service with current organisation..... 123

Figure 17: Distribution of respondents by highest university or equivalent qualification obtained 124

Figure 18: Distribution of respondents by current level of expertise..... 125

Figure 19: Distribution of respondents by job satisfaction level..... 126

Figure 20: Distribution of respondents by intention to leave their current organisation..... 127

Figure 21: Relative perceived importance of the three factors (three-factor solution)..... 158

Figure 22: Relative perceived importance of the six factors (six-factor solution)..... 170

Figure 23: Relative perceived importance of the six factors (Gaylard (2004) reanalysed six-factor solution) 182

Figure 24: Importance vs satisfied (means) per statement 197

Figure 25: Principal axis factoring – Scree plot for the initial solution ... 312

Figure 26: Parallel analysis - Plot of actual versus randomly generated eigenvalues..... 313

Figure 27: Importance vs satisfied (means) per statement (Gaylard (2004) data) 375

CHAPTER 1: INTRODUCTION

1.1 Purpose of the study

The purpose of this research is to identify the primary retention factors that Information Technology (IT) professionals in the South African financial services sector perceive to influence their decision on whether to stay with an organisation or not.

1.2 Context of the study

Despite being an emerging economy, and being classified as a third-world country, South Africa faces many of the same challenges as those faced by first-world, Western countries, particularly in the management of organisations and people, albeit on a much smaller scale. Included in these are the challenges that globalisation brings, such as the impact on working hours, as well as, and particularly pertinent to the South African scenario, the changing face of the labour market, including "the 'tightening' of skilled labour markets, …, and changes to the demographic makeup of the labour force" (Wickham & Fishwick, 2008, p. 87). One of the strategic challenges confronting South African organisations is that of a crippling lack of skilled human resources, specifically those proficient in the various knowledge worker sectors, of which IT is a subset.

The critical IT skills shortage has been increasing in South Africa, and globally for a number of years. Figure 1 indicates some of the reasons for global labour shortages in 2006 (Corporate Leadership Council, 2006b) with South Africa being very similar to the United States in the lack of qualified graduates being a primary reason for critical IT skills shortages. The latest research (Schofield, 2011) indicates that this shortage in South Africa particularly, may be getting worse despite the slowdown in the global economy since 2008. According to a South African skills survey conducted by the Joburg Centre for Software Engineering (JCSE) and the technology news website, ITWeb (Schofield, 2011), the current

projection is a shortage of up to 30,000 practitioners. This puts employers in a precarious position as employee attrition may result in employers having to do without the lost skills and knowledge.

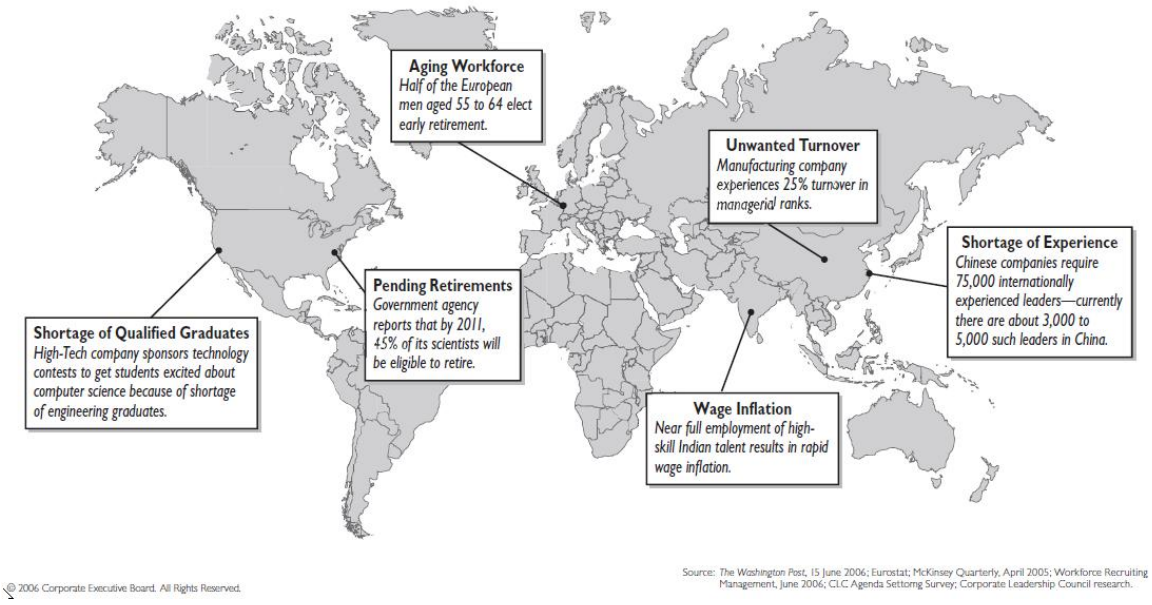


Figure 1: Reasons for global labour shortages in 2006
(Corporate Leadership Council, 2006b, p. 3)

Although exacerbated by the exodus of skilled people from the country, or ‘brain drain’ as it is commonly referred to, this is not the primary reason for concern. In the ITWeb report (Schofield, 2011), they point to another critical deficiency, that of the lack of an adequate education system. The global pipeline of students graduating with IT qualifications is insufficient to address the demand for IT professionals (Harris, 2012; ITWeb, 2008; Luftman, 2008; Schofield, 2011; Tapia & Kvasny, 2004), and as such, it is critical for organisations to be putting in place strategies to improve staff retention, so as not to be affected by the trickle of skills entering the IT field from this pipeline. Organisations will have to reduce their employee turnover rates, particularly of key employees, should they wish to remain competitive and ultimately survive in this barren environment.

However, life is nothing if not unpredictable, and this drive to reduce employee turnover rates was borne out in the second half of 2008 by the bursting of the ‘credit bubble’, and the subsequent global economic crisis. Whereas before the

middle of 2008, the prevailing outlook among IT professionals was confidently optimistic, expecting the demand for their skills to continue to increase, they should perhaps have been more cautious in their outlook. There is a saying that 'hindsight is 20/20 vision', and from our current temporal position in 2013, we can easily criticise those in power for not seeing the so-called 'credit crunch' and subsequent prolonged economic downturn coming, and doing something about it, but for many managers and employees in general, it was the "right hook" they never predicted (Sull, 2009, p. 80). Indeed, at the end of 2007, and into early 2008, there was a solid indication that IT professionals would continue to be in demand through 2008 in order to sustain organisations' corporate growth strategies and the rollout of various technology initiatives. According to the Robert Half Technology[1] 'IT Hiring Index and Skills Report', published early in 2008, "chief information officers (CIOs) anticipate[d] solid hiring activity in the first quarter of 2008" (K. S. Lee, 2008, p. 8) prior to the recession.

The 2008 global credit crunch and resulting economic meltdown led to economic downturns, recessions and threats of recessions in many of the world's leading economies. With a recession comes the need to cut costs wherever possible, and this includes, in some instances, salary and bonus budgets and all forms of monetary remuneration. While in early 2008 Luftman (2008, p. 37) believed that, despite the threat of recession, the demand for IT skills would continue to be high, Glen (2009, p. 30) believed a recession would not bode well for even the hardy IT sector and that budget cuts would be a reality for all employees as the business conditions were set to worsen. In a sense, both would be proven to be correct, as the demand for IT skills did continue through the recession (Schofield, 2010, 2011), but even this resilient sector did not completely dodge the bullets that brought many economies to their knees, with many companies cutting IT budgets, down-scaling their IT departments and retrenching IT professionals in the economically difficult years that followed (Harris, 2012).

[1] A provider of IT professionals on a project and full-time basis

O'Neil (2009) was more confident, being of the opinion that irrespective of the prevailing economic climate, and notwithstanding an uncertain job market, there would always be a market for top talent. He guarded against complacency in the organisational retention strategies for key employees and suggested frequent, reinforcing communication to put the minds of these employees at ease in the uneasy times. He was correct and many employers have subsequently had to experience first-hand the negative results of over-confidence in the retention of employees in difficult economic times. The past four years have been a buyer's market and Lanigan (2008) also cautioned the 'buyers' upfront, at the beginning of the crisis, warning against neglecting the new hires, and advocated implementing rigorous engagement and retention strategies in order to keep these high-value resources from looking elsewhere. One positive aspect for employers who were able to spend money on recruitment, was that there tended to be an increase in the availability of top candidates during the height of the recession, due to involuntary staff turnover. In addition, internal (existing employees) and external (prospective employees) wage pressures were reduced.

Despite the marketability of these high-value human assets, and the seemingly boundless demand for their skills, the negative economic climate reduced the, oftentimes high, risk propensity of IT professionals. According to global research undertaken by Accenture, a global management consulting, technology services and outsourcing company, in the third quarter of 2008 (Institute of Management & Administration, 2009a), and again in the fourth quarter of 2011 (Accenture, 2012), few professionals planned to leave employers despite job dissatisfaction. In 2009, almost half (46 per cent) of those surveyed said that the risk involved in taking a new job at that time was too great. Moreover, more than a quarter (27 per cent) of those polled indicated that they were consciously trying to improve their job security by improving their productivity and even working longer hours. In the 2011 survey, more than half of the respondents (57 per cent female and 59 per cent male) indicated that they were dissatisfied with their jobs; and more than two-thirds (69 per cent) were not planning to leave their current employers. Glen (2009) puts the past four years into perspective for IT professionals: "Those of us lucky enough to be employed have stressful jobs now" (p. 30).

While an economic crisis sparks the increased need for feelings of job security among employees, it should *not* be seen by employers as a signal to take advantage of employees in their state of vulnerability. It is arguably at times like this when employer support is most needed, and appreciated, by employees. Employers need to take cognisance of the prevailing acceptance that the recession is temporary, as are any tendencies towards securing job security by their employees. When economies recover, employees, and particularly highly sought after IT professionals, are likely to seek alternatives as soon as they become available, should they feel that their employers did not treat them reasonably during the difficult period.

Today, in 2013, with many of the European countries still in dire straits in terms of economic and credit crises, the global IT environment is one of the more healthy workplace environments, and in South Africa, the outlook for those with sought-after skills is still bright (Schofield, 2011). It is therefore becoming more important than ever for organisations to focus on retaining their skilled resources lest they lose the resources, and with them, the organisation's intellectual capital.

Based on the fact that IT professional retention is still a major concern in South Africa, considering the ever-widening skills gap, and noting the relative lack of research on this topic, it is appropriate to conduct research such as this. This research study was closely based on a 2004 study conducted by Gaylard (2004) within the geographically dispersed IT departments of a global gas supply company. This study could be referred to as a replication study of the Gaylard (2004) research, however, the researcher has chosen to label this a comparison study to reinforce one of the main objectives of this study, that being to compare current results with those obtained eight years ago by Gaylard (2004).

1.3 Problem statement

1.3.1 *Main problem*

The purpose of this research is to identify the primary retention factors that South African IT professionals, and in particular, IT professionals in the South African financial services sector, perceive to influence their voluntary turnover intention, also known as stay/go intentions, within their current organisation.

1.4 Significance of the study

A recent survey by the JCSE (Schofield, 2011) concluded that a significant number, 47 per cent, of the IT professional workforce are employed (or work as contractors) outside of the ICT sector in South Africa. One third of these are employed in the financial services sector; 17 per cent of all IT professionals. While studies such as these target respondents both inside and outside of the ICT sector in a holistic approach, there is additional information available about the composition of the IT professional workforce within the ICT sector in the form of reports from within the sector itself (from, for example, the MICT/ISETT SETA). This information provides the sector with more detail on how to manage these employees; and such detailed information is not readily available for almost half of IT professionals working outside of the sector. This JCSE survey highlighted the need for more specific information on the non-ICT sector IT professionals, with Schofield (2011) raising an interesting question “if almost half of practitioners work in other sectors, how can the MICT SETA reflect the demand for ICT skills” (Schofield, 2011, p. 12)? He went on to highlight the need for all stakeholders in all sectors to coordinate data and collaborate in order to identify, among other priorities, the skills retention practices that are applicable to all IT professionals.

This study fills this gap in that there have not been many studies performed in South Africa, targeting South African IT professional respondents to determine the antecedents to staff turnover specifically in the South African financial services industry. While there is quite a lot of literature and research that has been, and is

being, done in the area of employee retention within an organisation, Beecham, Baddoo, Hall, Robinson and Sharp (2008) are concerned that not enough work is being done to understand and measure an individual's motivation to stay in Software Engineering or IT as a profession as a whole (Beecham, et al., 2008). This study may encourage Human Resources (HR) practitioners to rethink their retention strategies, and make the necessary changes where strategies may have become obsolete or been shown to be ineffective. In doing so, organisations will be able to cut the costs associated with voluntary turnover, as well as mitigate the risks that go hand in hand with turnover of key employees, such as the inability of the organisation to grow and meet its strategic objectives. The result will be a more profitable, more agile and more competitive organisation. This study is particularly pertinent in the current economic climate, where the world stands at a turning point in the way organisations operate, and in South Africa, it is critical for those in power in organisations to be aware of the potential changes in attitudes of IT professionals with regard to voluntary turnover, and implement strategies to curb this turnover.

This study also gives an indication in terms of the time progression of the turnover opinions of IT professionals, by taking a 2004 study on the subject, conducted by Gaylard (2004), and replicating it based on current data, using a slightly different methodology and sample, and comparing the results.

The study may provide guidance to HR practitioners in their duties to implement strategies to retain employees through raising levels of organisational commitment. It may also indicate to HR practitioners which practices are obsolete, so that they can eliminate them from their retention repertoire.

This study may also guide managers of IT professionals on the precursors to voluntary turnover among their staff in an attempt to identify the signs of turnover intent and address this in time to retain their employees.

This study may also guide IT professionals in understanding themselves better in the context of their current employment relationship and assist in making

meaningful suggestions to their management to curb turnover based on their own attitudes and observations.

1.5 Delimitations of the study

The following delimitations of this research study are highlighted:

- Only IT professionals in the financial services sector were considered for this research;
- Only IT professionals in the South African context were included in this research study;
- The sample was drawn from permanent IT professionals, and no contractors were asked to complete the survey;
- The primary focus of the study was on internal IT departments within corporations, as opposed to IT consultancies; and
- This research report focuses specifically on the retention factors for IT professionals and does not include the attracting or developing of these employees.

1.6 Definition of terms

Table 1: Acronyms

Acronym	Expansion of Acronym
B-BBEE	Broad-based black economic empowerment
CLB	Career-life balance
EVP	Employment value proposition
HIPO employee	High-potential employee
ICT	Information and communications technology
IT	Information technology
JCSE	Joburg Centre for Software Engineering
QWL	Quality of work life

Boundaryless career – a career path that "may involve sequences of job opportunities that go beyond the boundaries of single employment settings" (Defillippi & Arthur, 1994, p. 307).

Career anchor – "[a pattern of] self-perceived talents, motives and values which guide, constrain, stabilise, and integrate the individual's career". Schein in Niederman, Sumner, and Maertz (2006, p. 131).

Employee engagement — "Engagement is the extent to which employees commit to something or someone in their organisation, how hard they work, and how long they stay as a result of that commitment" (Corporate Leadership Council, 2009, p. 6).

Financial services sector – defined for the purposes of this research as alluded to by PwC to include insurance, asset management, banking and capital markets (Winterboer, 2012).

Generation Y – also called “millennials” are workers “born between 1978 and 2000” (Shem, 2008, p. 1).

Information technology professional – for the purposes of this study, an IT professional is defined as an employee with specialist IT knowledge and who is involved in acquisition, processing, storage of vocal, pictorial, textual and numerical information which demands extensive use of IT skills and who is engaged daily in one or more of the following practices:

- IT strategy;
- IT hardware systems;
- IT software systems;
- IT infrastructure;
- IT project management;
- IT processes; and/or
- IT-related business processes.

Psychological contract – “A psychological contract emerges when one party believes that a promise of future returns has been made and thus an obligation has been created to provide future benefits. These promised future returns on the part of the organisation engender expectations among employees” (Flood, Turner, Ramamoorthy, & Pearson, 2001, p. 1154).

Risk – defined as “the extent to which there is uncertainty about whether potentially significant and/or disappointing outcomes of decisions are realised” Sitkin and Pablo in (Vardaman, Allen, Renn, & Moffitt, 2008, p. 1535).

Technostress – “includes the pressure of mastering the IT revolution, the daily frustrations and sudden interruptions of software bugs or system crashes, resulting in work intensification and workplace stress” (Rethinam & Ismail, 2008, p. 61).

Telecommuting – Cooper in Harpaz (2002, p. 75) suggests that there is one specific feature of telecommuting that is common to all definitions of telecommuting and that is the “emphasis on the utilisation of electronic

communications as the main channel of contact between the e-work carried out and the employing organisation". Telecommuting is also commonly referred to as teleworking and work-from-home.

1.7 Assumptions

The following assumptions were made regarding this research study:

- The research respondents were aware of the factors that drive their tenure and departure decisions. IT professionals are loyal to their careers and not necessarily their employers, and as such, it stands to reason that they are in tune with their likes and dislikes when it comes to current and potential employers. While this was critical for the success of the research, the assumption was made that the respondents would willingly articulate their preferences in terms of turnover intentions and reasons behind such attitudes;
- The respondents were IT professionals, who, by virtue of the environment in which they work, are expected to be highly skilled. It was therefore assumed that the respondents to the survey understood English and were able to understand the statements made in the questionnaire, to which they responded; and
- Closed-ended questions can adequately capture the cognitions of the respondents. The questionnaire was presented in such a way that the questions were closed. The assumption was made that the respondents would prefer this method of questioning, as they would not have to spend vast amounts of time thinking about the answers required in completing the questionnaire.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This literature review is a synthesis of current literature in the area of employee retention. What follows, by way of an introduction to the literature, are a number of examples of the multitude of often conflicting opinions, research and retention/turnover models prolific in the literature.

According to Smith and Speight (2006), empirical research exists to consistently indicate that “turnover intention [is] the strongest cognitive precursor of turnover” (p. 123). This prevailing attitude is corroborated by investigations conducted by Wöcke and Sutherland (2008) and Mano-Negrin (1998). Vardaman, Allen, Renn and Moffitt (2008) are of a different opinion; they believe that the link between turnover intentions and actual turnover, as indicated by numerous studies, has varied greatly historically and that, in their opinion, “turnover intentions rarely explain more than 20 per cent of turnover variance” (Vardaman, et al., 2008, p. 1534). Griffeth, Hom and Gaertner (2000) also found the links between various turnover determinants to be tenuous, and their study highlighted the limitations inherent in generalising the causes of turnover. Their study involved the introduction of moderators into the analysis of turnover, which elucidated a great deal of variability in the universal turnover formulations. Nevertheless, Griffeth et al. (2000) also agreed that various other predictors exist in the withdrawal process that have been shown to be some of the best predictors of turnover, such as job satisfaction and organisational commitment.

An alternative idea is offered by Trevor, Gerhart and Boudreau (1997), as originally suggested by March and Simon (1958), suggests that “voluntary employee separation is a function of perceived ease of movement and perceived desirability of movement” (Trevor, et al., 1997, p. 45). Furthermore, Vardaman et al. (2008) propose that an employee’s leave-intention is related to their ease of leaving, which may be an additional, situational, turnover moderator. For

employees in occupations where there is high demand, such as IT, it is suggested by Vardaman et al. (2008), that the risk to the employee in the turnover decision is inherently less, due to the seemingly certain opportunities in the market place, and that such employees may even leave without a concrete alternative to go to.

In a recent study conducted by the Institute for Corporate Productivity (Institute of Management & Administration, 2009b), it was found that there is still strong competition for top quality employees, despite the current global recession. This *Branding for Talent* survey indicated that, in late 2008, this competition was still stronger (despite the recession) than in 2003 and that 84 per cent of the surveyed companies predicted that the competition would become even fiercer by 2013. This prediction has all but come true; in South Africa specifically, the demand for high quality IT skills was still rising in 2011 (Schofield, 2011) and was estimated to continue rising for the foreseeable future.

It stands to reason then, that it is critical for employing companies to address the retention of quality employees, to prevent them leaving, and additionally to avoid the consequential drop in organisational productivity (Emerald Group Publishing Limited, 2008b), which seems to go hand in hand with high volumes of staff turnover. Despite two-thirds of HR practitioners wanting to reduce their organisations staff turnover, as indicated by a TalentDrain[2] survey in the United Kingdom, it would appear that three-quarters of the polled organisations have no inkling (neither strategy, nor budget allocation) on how they would go about achieving this (Eldridge, 2008). In addition, there would appear to be a common misconception on the part of the HR practitioners as to the reasons for voluntary turnover; 61 per cent believe it is due to “lack of promotion opportunities”, 49 per cent believe it is due to "inadequate pay", and 26 per cent believe it is due to a "poor relationship with [their] manager" (Eldridge, 2008, p. 70). Eldridge (2008) and TalentDrain also ran a concurrent survey, this time polling exited employees. This data revealed a different story to that believed by the HR practitioners; the

[2] Now called **great{with}talent** – http://www.greatwithtalent.com/ - (an organisation whose primary purpose is to work alongside organisations to reduce employee turnover and build engagement)

important factors for leavers were given as "uninteresting work and boredom" and "lack of training and development opportunities" (both 25 per cent), "lack of teamwork and co-operation" (19 per cent) and "promises not kept by management" (17 per cent) (Eldridge, 2008, p. 70). Hence, it is apparent that the conceptions of organisations, specifically the HR departments and employees, around staff turnover may be gross misconceptions. Their retention practices may be consequently flawed.

In Australia, a Delphi study (with a panel comprising HR practitioners, senior faculty members, and organisational psychologists) was conducted as the first phase of a study into understanding the issues pertaining to retention practices in large Australian organisations. This highlighted a number of issues that were identified by the panel as being important to permanent employees: “satisfying work environment, training and career development opportunities, reward and recognition, good pay and conditions, good working relationships, good resources, state of the art equipment, status, challenging job and autonomy” (Chew & Chan, 2008, p. 505). A group of HR practitioners were then asked to rank the top five. The results found by Chew and Chan (2008, p. 505) in this study highlighted the following five HR practices considered relevant for retention: “effective selection, reward and recognition of employee, provision of effective training, challenging employment structures and opportunities, and equity of compensation and benefits”. From these five practices, Chew and Chan (2008) interpreted four crucial areas that are relevant to employee retention, namely “person-organisation fit (P-O fit), remuneration and recognition, training and career development, and challenging assignment” (p. 505). In this case there would also appear to be a disconnect between these results, as proposed by academics and practitioners, and those identified, among employees, by Eldridge (2008) in the United Kingdom.

From these differences in opinion, both among the HR practitioners themselves and the employees, it is clear that there are many factors at play in the turnover decision of any employee, and that even these are by no means a comprehensive list.

This introduction highlights the need for theory and practice to converge into a set of factors which will assist HR practitioners in putting in place a successful employee retention programme, and until such factors are clearly identified, labelled and verified, the ability to adequately anticipate the voluntary turnover decisions of employees will remain elusive (Vardaman, et al., 2008).

This literature review commences with an expansion of the concept of the knowledge worker and the retention of these employees, as they are critical to the ultimate success of the modern organisation, and losing them implies the loss of intellectual capital. The first section proceeds to narrow this categorisation down to the IT professional, and in particular, the IT professional as a specific category of knowledge worker. The IT professional is the primary actor in this research and as a category of knowledge worker, the retention of IT professionals is similar, yet distinct to knowledge workers. It is important to take note of the retention factors required for knowledge workers, and more importantly in the context of this study, these factors in conjunction with the factors specific to the retention of IT professionals. The section that follows highlights the prevailing literature related to the variables perceived to influence the turnover decision. This section starts with the concept of recruitment. This is the critical first step in employee retention, as making the right decision on whom to employ upfront leads to a lower risk of losing the employee down the line to voluntary turnover. This is followed by discussions of the literature related to possible turnover factors and is loosely structured around the eight constructs of work attitudes as suggested by Mano-Negrin (1998, p. 155), namely: environment, returns, supervision, enrichment, feedback, organisational career prospects, stay and leave, with the addition of one, external influences. While the previous eight constructs pertain more to the internal push factors encouraging employees to consider voluntary turnover, the external influences section focuses more on the pull factors influencing employee retention.

2.2 The IT professional as knowledge worker

2.2.1 *The knowledge worker*

Peter F. Drucker (1999), well known for coining the term ‘knowledge worker’, poses the following questions, which are particularly relevant to this research on the retention of IT professionals, a subset of knowledge workers. If

> “… management’s job is to preserve the assets of the institution in its care, [W]hat does this mean when the knowledge of the individual knowledge worker becomes an asset—and, in more and more cases, the main asset—of an institution? What does this mean for personnel policy? What is needed to attract and to hold the highest producing knowledge workers” (Drucker, 1999, p. 88)?

In these few words, Drucker (1999) distils the essence of knowledge worker retention into the requirement to preserve the lifeblood of the modern knowledge organisation through the lure and ultimate retention of the best minds available.

Times have changed dramatically in the last fifty years and so too have organisations and the relationships employees have with their employers and superiors. “Pre-industrialised manager[s] [were] led by archaic dictatorial practices” (Duncan, 2008, p. 14). This management style may have worked in the retention of blue-collar, non-knowledge worker employees, as it was based on their fear of the unknown or of unemployment. However, in the current knowledge-driven environments, knowledge workers know their own worth, and are aware that other opportunities are available outside of their current situation. Applying these dictatorial practices in the form of restrictive corporate policies in the modern organisation will merely result in driving the most valuable problem-solving, success-driven individuals away (Duncan, 2008).

“Organisations pay extraordinary amounts of money and benefits to lure and keep the best knowledge workers” (Adelstein, 2008, p. 37). It would therefore be a true waste of all this money and the time spent on nurturing critical talent, if

organisations were to surrender their valuable, talented employees because of not understanding or addressing turnover motives and intentions. An umbrella concept for the factors that influence employees' turnover intentions is that of quality of work life (QWL). Rethinam and Ismail (2008) maintain that ensuring a sustainable level of QWL will only be possible if the HR practitioners re-design [knowledge] work, to take into account human factors, such as the variables listed in the following section. Only once this has been accomplished, will a smooth transition to an engaged knowledge based workforce be made possible (Rethinam & Ismail, 2008).

A final comment from Drucker (2002, p. 12) on the knowledge workforce which serves to underscore the criticality of the organisation's understanding of the knowledge worker: "in a traditional workforce, the worker serves the system; in a knowledge workforce, the system must serve the worker". This underpins the need for HR practices that encourage knowledge workers to remain with the organisation.

2.2.2 *The IT professional*

The group of IT professionals is a subset of the knowledge workers described previously and consequently, many of the retention factors influencing knowledge workers are also applicable in the retention of IT professionals;

> "IT professionals are involved in acquisition, processing, storage of vocal, pictorial, textual and numerical information which demand extensive use of IT skills" (Rethinam & Ismail, 2008, p. 60).

The IT working environment exposes IT professionals to:

> "… high task complexity that possibly leads them to high strain, uncertainty, lack of proper personal development opportunities as well as a greater imbalance of work with non-work activities" (Rethinam & Ismail, 2008, p. 60).

These factors and variables may have a huge effect on the retention of the IT professional, many of which are discussed in the following section in the context of IT professional retention.

2.3 Variables influencing staff retention and turnover

The often hostile environment in which employers struggle to retain their critical talent requires effective HR strategies to be in place that can readily address any retention problems and curb the oftentimes runaway turnover seen in knowledge organisations and specifically among IT professionals.

In studying the linkage between work attitudes and turnover in the medical sector, Mano-Negrin (1998) identified eight attitudinal constructs that are convenient categorisations for the literature on staff retention and turnover in general, irrespective of the sector under investigation (in this case, IT). The eight constructs identified were: "environment, returns, supervision, enrichment, feedback, organisational career prospects, stay, and leave" (Mano-Negrin, 1998, p. 155). In addition to these eight constructs, an additional construct has been identified, named 'external influences', which has been noted as being an important additional branch of the literature. The literature for this section is reviewed based on these nine criteria. First, however, it is important to comment on the recruitment process as the first, and often overlooked, step in the retention lifecycle.

2.3.1 *Recruitment process*

It has long been accepted that it is possible to detect precursors to turnover intention in the recruitment and selection of new hires (Chew & Chan, 2008; Deery, 2008; Palan & Berhad, 2007). It has however, seldom formed part of the official branches of research undertaken to examine turnover intention. Following are some of the key factors to assess as potential antecedents of turnover that may be apparent during the recruitment and selection process and should be

taken into account at the outset when appointing new employees, so that these do not become possible reasons for turnover down the line.

The person-organisation (P-O) fit, which can be determined during the recruitment process, and which is an indication of the congruence of the values of the individual with those of the organisation (Van Vianen, 2000), provides a useful indication as to the predisposition of the potential employee to remaining with the organisation (Chew & Chan, 2008; Griffeth, et al., 2000). It is therefore crucial that the prospective employee be assessed as being a good fit with the organisation for the recruitment to result in a long tenure with mutual benefits experienced by both parties (McCulloch & Turban, 2007). It may also be useful to continually reassess the organisational fit during the employment lifecycle, as a bad fit may be indicative of turnover intentions, while a good fit suggests commitment on the part of the employee, and is an indication that they are still deriving benefits from the employment situation (Chew & Chan, 2008).

Chew and Chan (2008) do however, advocate caution when using the person-organisation fit and are adamant that this indicator not be the only one used in the recruitment and selection process and should be balanced with other recruitment practices, such as merit. Not only could this possibly biased hiring process present a problem from a discriminatory perspective, but it may “result[s] in an organisation hiring clones” (Chew & Chan, 2008, p. 515).

A second key recruitment practice that has positive results from the retention perspective is that of employee referrals. These have been found to be an extremely successful recruitment strategy (Corporate Leadership Council, 2008a; Emerald Group Publishing Limited, 2008b; Ferratt, Agarwal, Moore, & Brown, 1999; Lockwood & Ansari, 1999; Sanjay, 2006). Philips in India (Corporate Leadership Council, 2008a) have come to the realisation that the more the existing employees have a good person-organisation fit and feel that the organisation is a great place to work, the more candidates will be available due to the word of mouth references of these existing employees, and the more the organisation will benefit from employee referrals. Finnegan (Institute of Management & Administration, 2008b) is in agreement with this and suggests that

a good source for committed, engaged employees is to look to your existing workforce for employee referrals. As Ferratt et al. (1999) and Morgan (Emerald Group Publishing Limited, 2008b) point out, referral recruits from the existing IT professionals' interpersonal networks, "require considerably less socialisation and can be integrated into the fabric of the organisation more easily" (Ferratt, et al., 1999, p. 108). Morgan (Emerald Group Publishing Limited, 2008b) and Cappelli (2008) also advocate recruiting from within the organisation as a complementary practice to referral recruitment.

A third aspect of the recruitment process that is of interest in studying employee retention is the relatively new challenge of recruiting, and ultimately retaining, generation Y employees. The strategies employed to recruit employees, as well as all other HR practices, will need to be adapted to this new generation. Studies among HR practitioners indicate that one-third have already felt compelled to change the ways in which they interact with prospective employees from this generation (Institute of Management & Administration, 2009b).

The three aspects discussed regarding the recruitment or on-boarding process are deemed critical in the long-term retention of employees and should be considered as the first step in employee retention strategies – get the most appropriate employees on board in the first place to make the retention process easier in the long-term.

Nine attitudinal constructs have been used to categorise the literature in the following sections. Eight of these constructs were originally identified by Mano-Negrin (1998), and the ninth construct has been added to take into account the possible external influences on turnover decisions, specifically in the South African context.

2.3.2 *Environment*

> "… satisfaction with work arrangements, work load, physical accommodations, schedule flexibility, work condition" (Mano-Negrin, 1998, p. 155).

This section focuses on the environmental factors at play in employee retention.

Following a survey conducted in 2008 by Accenture, a global management consulting, technology services and outsourcing company, on whether fewer US employees would be looking for new jobs due to the global recession, David Smith, from Accenture was interviewed by HRfocus (Institute of Management & Administration, 2009a). He was of the opinion that, in the global economic crisis, it was imperative that employers continued improving the work experience of employees. While the survey conducted indicated that employees had lower turnover intentions during the global economic crisis, it was likely that employees, feeling disregarded during this period, were likely to look elsewhere for employment as soon as the economy improved.

The 2008 Accenture survey (Institute of Management & Administration, 2009a), previously mentioned, also indicated the two primary areas where employees feel their employers could assist in weathering the economic storm would be to provide opportunities for telecommuting (26 per cent) and instituting four-day work weeks (24 per cent). In a 2008 Robert Half Technology survey of chief information officers to identify the key retention strategies for IT staff, it was found that while the requirement for flexible schedules was cited by 21 per cent of those surveyed, telecommuting was also cited by 7 per cent of the respondents (Institute of Management & Administration, 2008a). Telecommuting has thus become increasingly important in the wake of the credit crunch of 2008.

Not only does telecommuting provide employees with alternatives to sitting in traffic for hours on end in order to get to the office, Lanigan (2008) asserts that flexible working arrangements, such as telecommuting, can also result in increased productivity. In this way employees can achieve a more balanced and satisfying lifestyle while pleasing their managers by improving the quality of work and keeping their families happy as well (Harpaz, 2002). More balance in the life of employees is therefore key to keeping them happy and retaining their services.

IT leaders have long struggled with employee retention, often attributed to the delivery pressures these employees face. The concept of work-life balance (or

work-family balance) has been touted as the silver bullet in retaining key employees, by being sensitive to their need for balance, and adapting work environments accordingly (Deery, 2008; Luftman, 2008; Sumner, 2008). Unfortunately, where telecommuting was seen as one way to attain this balance, it has had the opposite effect, particularly where employees exercise the 'working from home' telecommuting option, and where the employees in question are IT professionals working on their computers (Sumner, 2008). The compulsion here for the employee is for them to carry on working, even when they have completed their contractually obligated number of hours. In some instances, it is even *expected* of the IT professional to put in extra hours without question, depending on demand, and with telecommuting in place, this results in work-life *conflict*; between work and family relationships (Rethinam & Ismail, 2008), as opposed to the original intention of work-life *balance*.

> "This [work-family] conflict affects a person's level of stress and turnover intent. Turnover intent occurs when an employee thinks about quitting his/her job. Turnover intent is higher when work interferes with family" (Sumner, 2008, p. 128).

In a study consisting of interviews with HR practitioners, Wickham and Fishwick (2008) determined that employees who had flexible work arrangements accrued excessive unpaid overtime and resulted either in burned-out employees, or the opposite was observed; that although convenient for the employee, the employer suffers due to a drop in productivity. Berris and Jackson (2008, p. 38) put this idea succinctly: "In the end, work environment is what drives employee turnover and ultimately profits". Despite these problems, many HR practitioners believe flexible schedules improve employee retention (Institute of Management & Administration, 2008a).

Despite the problems with flexible work arrangements, 65 per cent of employees still cite this as a deciding factor, above salary considerations when evaluating job opportunities (K. S. Lee, 2008). Not only is this the new way of working, it is the way the new workers, the tech-savvy generation Y employees, want to work

(Shem, 2008). Wickham and Fishwick (2008, p. 89) emphasise the need for a "fundamental shift" in HR practices and management to a:

> "…holistic approach to HR management implies a greater awareness of the total context of worker's daily lives, not just those hours they spend at work" (Elloy & Smith, 2003, p. 63).

This is necessary in order to understand what work arrangements would suit each individual employee best.

One of the potential causes of a lack of representation (Mawson, 2012) of women in the IT sector historically could be precisely this – the lack of job flexibility (Bedggood & Phillips, 2008; Sumner, 2008). Bedggood and Phillips (2008) believe that improving job flexibility will result in:

> "… increasing job satisfaction, increasing employee retention and save individuals money as well as having positive environmental and health benefits (reducing road accidents, less stress, etc.)" (Bedggood & Phillips, 2008, p. 34).

By excluding the retention requirements of women, organisations are ignoring at least half of the South African population, which is shortsighted and not in the organisation's economic best interest.

Drucker (1999) maintains that knowledge workers should be seen economically, as an asset of the company for which they work. They own the means of production; what they produce is a result of them using their brain, the means of production. Because the knowledge workers means of production is fundamentally his/her own, this means of production is portable, and the knowledge worker is mobile (Drucker, 1999). As such, it is extremely important to keep the knowledge worker committed to the organisation, lest they leave, taking with them one of the organisations means of production, which is the knowledge worker brain of this employee. The relationship between employee and employer is essentially a symbiotic one, but one that can quickly turn sour and cost the company a valuable asset. The knowledge worker therefore holds a *not*

insignificant amount of power over the employer. The implication of this is that the employee is no longer forced to be loyal to the organisation (Morgan, Campione, & Jerrell, 2004); whereas:

> "… with Matures (born before 1946) and Baby Boomers (born from 1946 through 1964), managers could assume workers would remain loyal, long-term employees if given a competitive salary and offered traditional retirement packages" (Shem, 2008, p. 1).

Modern employees, especially those from the Y generation are loyal to themselves and their careers (Wickham & Fishwick, 2008), but not necessarily to their organisation. Wickham and Fishwick (2008) suggest therefore, that the concept of work-life balance be broadened to a career-life balance (CLB) approach to cater for this career loyalty. Wickham and Fishwick (2008) suggested that a successful CLB approach focuses on three key pillars of balance: "time, involvement and satisfaction" (Wickham & Fishwick, 2008, p. 89). There needs to be balance in each of these pillars in order to ensure balance in the career-life equation.

The first of these pillars, time, is advocated by Finnegan (Institute of Management & Administration, 2008b), as being very important and specifically more important than traditional retention factors such as pay and benefits. Balance in time spent at work and away from work needs to be maintained.

At the organisational level, there are a number of actions that can be adopted to retain good staff as well as assist in balancing work and family life (Deery, 2008, p. 804), the 'time' pillar. These include:

- "providing flexible working hours such as a roster for days off and family friendly starting and finishing times;
- Allowing flexible work arrangements such as job sharing and working at home;
- Providing training opportunities during work time;

- Providing adequate resources for staff so that they can undertake their jobs properly;
- Determining correct staffing levels so that staff are not overloaded;
- Allowing adequate breaks during the working day;
- Having provision for various types of leave such as carer's leave and 'time-out' sabbatical types of leave;
- Rewarding staff for completing their tasks, not merely for presenteeism;
- Staff functions that involve families;
- Providing, if possible, health and well-being opportunities such as access to gymnasiums or at least time to exercise; and
- Encouraging sound management practices" (Deery, 2008, p. 804).

The environment in which employees find themselves working is a critical success factor in retaining employees. This is especially applicable to IT professionals, knowledge workers and generation Y employees. The accommodation by management of flexible work arrangements, such as telecommuting, flexible scheduling and leave flexibility, all contribute to an environment conducive to productivity and overall employee happiness. An effective work environment meets the organisational and employee's personal needs and values, which in turn

> "… promote[s] health, well-being, job security, job satisfaction, competency development and balance between work and non-work life" (Rethinam & Ismail, 2008, p. 60).

2.3.3 *Returns (reward and recognition)*

> "… importance given to salary, pension funds, non-monetary benefits and career prospects" (Mano-Negrin, 1998, p. 155).

This section focuses on the reward factors at play in employee retention.

Companies without a brand, profile or reputation to speak of are hardest hit in trying economic times such as are still prevalent. They are forced to compete on money in the remuneration arena (Emerald Group Publishing Limited, 2008a), and this may well be money that they do not have. Throwing money at a recruitment problem may result in bidding wars with competitors. This can be particularly problematic when dealing with IT professionals, as they will go where the technological excitement and growth potential is, irrespective of how much money is thrown at them (Luftman, 2008). Money is therefore not the silver bullet it was once believed to be in retaining employees, however, it is still significant in the turnover decision, and is therefore relevant and important in any discussion on the retention of employees.

The monetary remuneration, or reward, of employees has historically received much of the HR practitioner focus in the form of traditional employee retention strategies (Institute of Management & Administration, 2008a; Shem, 2008). However, in the 21st century, employees want more than just money (Chew & Chan, 2008; Emerald Group Publishing Limited, 2008a; Lanigan, 2008; K. S. Lee, 2008; Luftman, 2008; Shem, 2008). They are transitioning from the need of the quantitative to the need for qualitative returns. As discussed prior, knowledge workers and generation Y employees want the intangible, non-traditional rewards: a pleasant working environment and quality time with their families, for example. This could be in the employers' favour, in the wake of the economic downturn, with many organisations still struggling to stay afloat. Many companies do not necessarily have the material rewards to give their employees, and there may be just such creative intangible intrinsic reward options that will not break the employer's budget, but will show good faith, and may ultimately and unwittingly greatly enhance the employer-employee relationship and promote retention (Lanigan, 2008).

Towards the end of 2008, a few months into the global economic crisis, employers realised that they would have to consider implementing serious cost-cutting measures in order to mitigate the risks of the impending recession. According to the Hay Group's Global Employee Pay and Staffing Survey (Institute of

Management & Administration, 2009c), in which companies on six continents took part, one way in which employers were going about this cost-cutting was to implement pay increase freezes[3].

In addition, the Hay Group Survey (Institute of Management & Administration, 2009c) revealed that about 48 per cent of the respondents were freezing existing staff headcounts, and that some of these were even considering the drastic measures of letting some of their staff go. This was a significant increase on the March 2008 survey, in which 20 per cent of respondents felt they would be freezing or decreasing staff. In another survey undertaken by HRfocus, both the freeze of planned pay increases, and the freeze on hiring were two of the most common actions being contemplated to mitigate the risky environment (Institute of Management & Administration, 2009d).

If there are reward budgets that are still intact at this point after the long economic downturn, companies would be wise to use these to reward the top performers (Chew & Chan, 2008) and key employees. Deery (2008) is adamant that a key aspect in improving an employees work-life balance, and thereby improving commitment to the organisation and reducing turnover intention is to reward staff for completing their assigned tasks, and to reward fairly and adequately (Flood, et al., 2001; Rethinam & Ismail, 2008), and not just to reward employees for merely turning up for work. High-performing employees do not appreciate the fact that the lower performing employees are being equally rewarded for incomparable performance and when the higher performers are the ones an organisation wants to retain, these are the ones that should feel, and ultimately be, valued.

Traditional retention strategies and fringe benefits are not completely passé, though. Lee (2008) believes there is still a place for bonuses and generous benefits packages. There is also a general acceptance, when it comes to IT professionals, that while they do not stay for the money alone, they will accept

[3] It should be noted that of all six regions surveyed, "Africa and the Middle East were the least affected by the downturn: Only 9 per cent of African companies and 12 per cent of Middle Eastern companies reported business results significantly below their targets."

nothing less than market-related remuneration (Emerald Group Publishing Limited, 2007; Ferratt, et al., 1999; Sanjay, 2006).

In attempting to determine the factors that influence the turnover decisions of employees, it is very important to poll the *right people* in surveys, and to ensure that these include representative responses from the people on the ground; the targets/beneficiaries of retention strategies. Results from a Robert Half Technology survey (Institute of Management & Administration, 2008a) conducted among chief information officers (CIOs) in 2008 seems to indicate that these top-level managers are out of touch with the realities of life in the IT trenches. Over one quarter (27 per cent) of these CIOs are of the opinion that compensation is the most effective way to retain IT professionals (Institute of Management & Administration, 2008a). In addition, 2 per cent of the CIO respondents (Institute of Management & Administration, 2008a) believe that granting company stock or options is also key to retention, which would seem to strengthen the notion that they may be out of touch in their belief that traditional benefits are still the most effective in retaining employees.

There would also appear to be a generational differentiation to be made in terms of the importance of remuneration in the lives of employees generally, and in their turnover decisions in particular. In previous generations, managers could be certain that employees were looking for job security, and were happy with long-term employment, provided they received a competitive salary and good retirement benefits (Shem, 2008). Generation Y employees are very different in remuneration preferences to their parents and grandparents before them.

> "While salary is still an important factor in employment decisions, a number of other working conditions are equally important. Managers who want to keep their youngest employees need to rethink how work practices are structured to appeal to the interests of generation Y employees" (Shem, 2008, p. 1).

Financial reward is no longer the primary, singularly important retention factor many HR departments used to (and still do) believe it to be. Many 21st century

employees, and very definitely the generation Y employees are looking for something more meaningful in their careers and while money is still seen as one of the more important elements in retaining employees, it is often the intangible benefits that drive retention. A final point on returns, and in particular, on rewards, is made by Lanigan (2008):

> "A flexible benefits package is very appealing to employees. It allows them the option to choose and tailor benefits to suit their individual requirements" (p. 50).

It may therefore not be necessary to provide all of the various reward options, but just allowing the employee to have a choice is a good enough strategy.

2.3.4 *Supervision*

> "… satisfaction with supervisor, cooperation, autonomy, boss-caring" (Mano-Negrin, 1998, p. 155).

This section focuses on the supervision factors at play in employee retention.

Hamel (2009) expresses the challenge that 21st century management faces in inspiring knowledge workers very appropriately:

> "How, in a creative economy where entrepreneurial genius is the secret to success, do you inspire employees to bring the gifts of initiative, imagination, and passion to work every day" (Hamel, 2009, p. 92)?

Managers should be aware of the roles they play in their subordinates' lives, and how their behaviour may positively, or negatively, impact their employees' work lives and ultimately turnover intention (Emerald Group Publishing Limited, 2008b). Morgan (Emerald Group Publishing Limited, 2008b) believes that managers should see themselves through their employees eyes, and strive to be role models for these employees by living the values of self-improvement, reliability, composure, and leadership. In addition to these personal traits, Finnegan

(Institute of Management & Administration, 2008b) suggests that perhaps the most crucial accomplishment for any supervisor, is to engender trust among their subordinates. This includes being honest, doing what you say you are going to do, communicating and supporting company policies, taking the responsibility for the development of their team, and encouraging the team (Institute of Management & Administration, 2008b; Sanjay, 2006).

Encouragement is critical in an economically unstable environment. Glen (2009) maintains that in trying times, managers hold the fragile emotional states of the employees in their hands. Managers need to acknowledge the crisis, not try to sweep it under the carpet; they need to show their determination in the face of difficulty and assert their positivity that the prevailing reality is short-term and that it will get better.

It is the managers' responsibility in uncertain times, to convince the employees to trust them and the company. The employees need to know and believe that the company, specifically their direct line manager, believes they will get through the crisis. Glen (2009) believes that one of the hardest challenges facing a manager in an economic downturn is to keep employees focused on the tasks at hand. This is counter-intuitive and difficult, but is necessary if the organisation is to have any chance of survival and long-term success (Glen, 2009), and in so doing for the employees to retain their jobs. In order to prevent panic in economically uncertain times, Rhodes and Stelter (2009) believe that organised and coherent, planned responses are key; Glen (2009, p. 30) presents the two choices as follows: "Stress may be unavoidable, but panic is not".

Irrespective of economic climate, Hamel (2009) believes that it is critical to remove all command-and-control systems from the managers' toolbox, as these are seen as indications of management mistrust and the ensuing doubt in employee competence and commitment by management.

> "Organisational adaptability, innovation, and employee engagement can only thrive in a high-trust, low-fear culture" (Hamel, 2009, p. 93).

This is where information and ideas are shared freely, without fear of reprimand.

Another demonstration of trust by management is granting employees the freedom to do what is required without micro-management. This micro-management, or top-down supervision, as Hamel (2009) describes it, stifles creativity and employee engagement. Knowledge workers, and in particular IT professionals, need to be made responsible for their own productivity, as Drucker (1999) proposes, essentially allowing knowledge workers to manage themselves as employees capable of self-discipline (Hamel, 2009). This self-management translates to 'autonomy' (Drucker, 1999).

It is critical for employees to receive management support to make time-critical decisions, as well as acquiring the necessary skills with which to make these decisions (Emerald Group Publishing Limited, 2008a). Employees need to feel empowered (Sanjay, 2006). It is only with these tools that knowledge workers will be able to respond quickly and effectively to the challenges resulting from doing business in the 21st century, and in so doing for the organisation to remain competitive. Hamel (2009) believes that the scope of employee autonomy in today's business environment is insufficient and that employees should be allowed to experiment and propose initiatives, which will be taken seriously by those higher up in the hierarchy. In his discussion on autonomy, Luftman (2008) specifically refers to the IT professional's need to stay abreast of changing technology and that in order to ensure commitment, organisations should encourage their employees to stay up to date with the emerging technologies. By providing this training, employers can indicate their interest in growing the employees in their careers (Luftman, 2008).

Autonomy is also an important requirement for the new generation of employees, the so-called generation Y employees, entering the job market. They believe in instant gratification, such as moving ahead based on merit and not on tenure, in being continuously appraised and in receiving frequent feedback from their superiors. According to Shem (2008) they relish independence from authority and prefer to work at their own pace. Shem (2008) also maintains that, in interacting with generation Y employees, managers should "give praise generously, personally, [and] sincerely" (p. 2), and that they have great respect for

experienced individuals and that they look to these individuals “as guides, leaders, and role models” (Shem, 2008, p. 2). In many ways, generation Y employees are not unlike knowledge workers and IT professionals in particular. IT professionals are also in need of respect from supervisors, recognition for their contributions, and as Luftman (2008) describes it, to be shown to be “appreciated as valued members of the organisation” (p. 37).

The Corporate Leadership Council (2008b) believes that the line manager is a critical determinant of employee engagement and commitment. It maintains that:

> “… although commitment to the manager is not itself the most powerful form of commitment, managers have tremendous impact on their employees’ commitment to the team, organisation, and job. To maximise employee value, managers must create these other, more valuable forms of commitment in their employees” (Corporate Leadership Council, 2004, p. 41).

It has found through numerous studies that effective management-driven strategies to improve commitment and retention include:

- “Establishing the connection between an employee’s day-to-day work and organisational strategy;
- Clarifying how employee efforts drive organisational success; and
- Actively reinforcing [the organisation’s] cultural traits that impact employee engagement” (Corporate Leadership Council, 2008b, p. 2).

All three of these strategies have been proven to significantly improve the effort levels of employees, with the clear mapping of the employee’s objectives to the organisation’s strategy resulting in up to 32 per cent improvement in effort (Corporate Leadership Council, 2008b). Three cultural traits that are evident in highly engaged organisations are open communication, innovation and flexibility.

Glen (2009) states the need for managers to understand the human aspect of management:

> "Now more than ever, we need to realise that we are not managers of stuff, but of people who do stuff. We don't manage tasks; we manage the people who do those tasks" (Glen, 2009, p. 30).

Through understanding this, managers will be able identify with their staff and ultimately be better able to retain them.

2.3.5 *Enrichment (employability and personal growth)*

> "… importance given to learning new things, taking courses" (Mano-Negrin, 1998, p. 155).

This section focuses on the personal enrichment factors at play in employee retention.

The idea of enhancing personal employability and ensuring personal growth is possibly one of the IT professionals' most pressing needs. It is critical for these employees to avoid skill obsolescence in order to ensure their continued employability (Loogma, Umarik, & Vilu, 2004). While it is generally thought that highly-skilled knowledge workers are more loyal to their careers than to any one organisation (Chew & Chan, 2008; Loogma, et al., 2004; Scholarios et al., 2008; Wickham & Fishwick, 2008), it is also accepted that organisations providing opportunities for employees' personal growth encourages retention (Maurer & Lippstreu, 2008; Palan & Berhad, 2007; Scholarios, et al., 2008). Chew and Chan (2008) cite contemporary studies into training and development and have found that such provisions significantly affect job attitudes. In a survey undertaken by Robert Half Technology (Institute of Management & Administration, 2008a), 21 per cent of the respondents cited the provision of professional development opportunities to be key in IT employee retention. In a tight labour market, Ferratt et al. (1999) believe that the availability of new technologies and training opportunities are emerging as two of the most important elements for competitive differentiation.

The concept of “boundaryless career”, as defined by Defillippi and Arthur (1994, p. 307), and alluded to by others (Cappelli, 2008; Lamb & Sutherland, 2010; Muja & Appelbaum, 2012; Stahl, Chua, Caligiuri, Cerdin, & Taniguchi, 2009), implies that employees no longer have a ‘career for life’, that the behavioural characteristics of this boundaryless career are ambiguity, uncertainty and a need for flexible behaviour (Loogma, et al., 2004). In order for the knowledge worker to succeed in this environment, the knowledge worker is required to maintain the highest levels of professional and personal skills (Adelstein, 2008). The knowledge worker is therefore required to embark on a journey of continuous learning (Drucker, 1999), to be maintained throughout their career. Luftman (2008) asserts that for IT professionals, the creation of a work environment where “leveraging new technologies, demanding creativity in addressing complex IT issues and providing access to continuous learning” (p. 37) should be a top priority for organisations. It is only through continuous learning that the first two goals, ‘leveraging new technologies’, and ‘demanding creativity in addressing complex IT issues’ are made possible (Luftman, 2008, p. 37).

In the slow economic climate still prevalent today, where cost-cutting is an everyday occurrence in order to ensure organisational survival, O'Neil (2009) encourages organisations to continue training and career development efforts.

> “These programs help employees develop critical skills and build relationships that can ensure your organisation's long-term success. When the business environment improves, you want your people to have the skills they need to compete” (O'Neil, 2009, p. 8).

Chew and Chan (2008) and Sanjay (2006) believe that by providing job enrichment initiatives, organisations can benefit greatly in the form of increased productivity in the workplace. Such job enrichment initiatives should include opportunities for international assignments, if the organisation is able to provide such opportunities within their global footprint (Stahl, et al., 2009). These opportunities encourage high potential (HIPO) employees to remain with the organisation.

Generation Y employees are also very particular in their requirements for personal and professional development, and expect these opportunities to be made available to them in order for them to grow in their careers (Shem, 2008).

Rethinam and Ismail (2008) stress that enabling an employee to develop and use all their capabilities, ensuring an effective work environment, which includes competency development, is critical to enhance quality of work life, which in turn encourages employees to remain with the organisation. Scholarios et al. (2008) have found that one of the main categories of knowledge worker likely to be motivated by development and status, are 'software workers' or IT professionals.

This employee development is vital to the IT professional's employability.

> "More broadly, the demise of organisational job security, the pace of technological change and the career actor's interest in employability converge to promote the continuous pursuit of new occupational know-how" (Defillippi & Arthur, 1994, p. 313).

Employers providing these opportunities for gaining this knowledge will reap the benefit of the training outlay in a reciprocal manner, by them being the recipients of the application of the newly acquired knowledge, by having a more productive work environment, and by receiving a certain level of employee commitment to the organisation. It would be more than they would receive were they not to provide these personal and professional development opportunities.

2.3.6 *Feedback (communication and involvement)*

> "… importance given to getting specific instructions, being informed, being appreciated" (Mano-Negrin, 1998, p. 155).

This section focuses on the feedback factors at play in employee retention.

One of the key areas where management need to focus their attentions, in order to build employee commitment and retention, is that of communication (Ferratt, et al., 1999). Lanigan (2008) asserts that employee feelings of involvement and

commitment emanate from good communication. One often hears anecdotes about external customers knowing more about any organisation, such as product releases, than do the employees working for the organisation. This is particularly concerning when such incidents happen on the front line thereby projecting a view of incompetence on the part of the employees. In these scenarios, it is obvious that the organisations in question have not yet realised that communicating to their employees is possibly more important than external communication in the form of marketing (Emerald Group Publishing Limited, 2008a). Employees need to know that they are deemed to be important enough to be kept "informed of changes, developments and issues within the organisation" (Emerald Group Publishing Limited, 2008a, p. 14) for which they work.

In communicating with employees, managers should always pay attention to the human element.

> "To earn employees' commitment to the initiatives, the [management] team must articulate the threats facing the organisation, explain why change is needed and what it will entail, and clearly communicate to individuals how they will be affected" (Rhodes & Stelter, 2009, p. 56).

Managers need to ensure that their communications relay trust in the employees and convey positive slants to negative messages wherever possible.

Nowhere is the need for open and honest communication as critical as it is between IT professionals and their chosen organisation. IT professionals need to feel involved in the organisation, to feel their suggestions are being considered, and that they are appreciated in the organisation (Luftman, 2008). They need to feel that their efforts and contributions are recognised (Chew & Chan, 2008). Lanigan (2008) claims that this belief that employees feel that they are making a meaningful contribution to, and the involvement they feel in the organisation, ultimately helps to foster loyalty and participation. Many HIPO employees do not work only for what they are being paid, they want something more intangible; they want to work for organisations with vision and direction (Emerald Group

Publishing Limited, 2008a), and feel that they are directly involved in realising this vision.

This need to make a difference is especially true for generation Y employees, many of whom only work for specific organisations for the intangible benefits they receive. In addition, these generation Y employees do not appreciate having to wait for annual feedback on their performance; they expect immediate feedback and communication from their superiors (Shem, 2008). Chew and Chan (2008) also refer to the need for adequate performance feedback to foster productivity and enable employees to achieve their own goals, and at the same time, attain the organisations objectives.

Employee involvement and the feeling of being appreciated also come with appropriate recognition structures, especially recognition of competence and excellence. Morgan maintains (Emerald Group Publishing Limited, 2008b) that traditional rewards such as monetary rewards, should not take the place of true recognition, which entails the articulation of the employee's value to the company, and involves the communication of such recognition both to the employee and where appropriate, to the organisation in general.

In order to retain employees and specifically good IT professionals, they need to feel actively involved in the organisations for which they work, which requires good overall organisational communication on vision, goals and strategies, as well as direct individual communication from management to convey the individual's importance in realising these goals. Through good communication, employees are led to believe that they can make a difference and will be recognised. Constant and immediate communication and feedback from direct line management needs to be honest and open and indicate a certain level of personal interest in the employee's well-being, as well as their career growth within the organisation.

2.3.7 *Organisational career prospects*

"… evaluation of organisational career opportunities, departmental opportunities, internal labour markets" (Mano-Negrin, 1998, p. 155).

This section focuses on the organisational career prospects at play in employee retention.

Providing employees with a career path and mapping on how they can follow that path are very important factors in fostering employee engagement (Emerald Group Publishing Limited, 2008a) and retention. Knowledge workers, and IT professionals in particular, like to know that they are progressing in their careers within the organisation, and if they are not convinced that this is the case, they will move on in order to progress elsewhere (Ferratt, et al., 1999). In this way, having their expectations met reinforces the psychological contract which in turn discourages turnover (Chew & Chan, 2008). Herriot, Manning, and Kidd (1997) define the psychological contract as:

> "… the perceptions of mutual obligations to each other held by the two parties in the employment relationship, the organisation and the employee" (Herriot, et al., 1997, p. 151).

IT professionals also feel more engaged if the organisation is seen to be promoting from within, thus supporting an attitude indicative of a certain level of faith in their current employees' skills (Ferratt, et al., 1999).

HIPO employees in particular need to be convinced of the company's commitment to them (Bohannon, 2008), and it may often work in the employers favour to fast-track these HIPO employees' careers to keep challenging them in the work they are given (Chew & Chan, 2008). The global consulting firm BlessingWhite (Emerald Group Publishing Limited, 2008a), as well as Josefek and Kauffman (2003) express caution in the use of broad-brush treatment of employees and reiterate the need for personalised career planning for each employee, in order to carve out a unique place for each individual in the organisation. This is especially required for HIPO IT professionals to influence retention.

2.3.8 *Stay attitudes*

"… attitudes included overall job satisfaction and organisational commitment" (Mano-Negrin, 1998, p. 155).

This section focuses on the employee's stay attitudes towards the turnover decision.

Both job satisfaction and organisational commitment, which are key indicators of stay attitudes, are in one way or another linked to the preceding variables in this section (including that of the recruitment process) in influencing retention.

According to research done by the Corporate Leadership Council (2006b) employees join an organisation for 'the opportunity and 'the rewards' and stay for 'the people' and 'the organisation' as depicted in Figure 2.

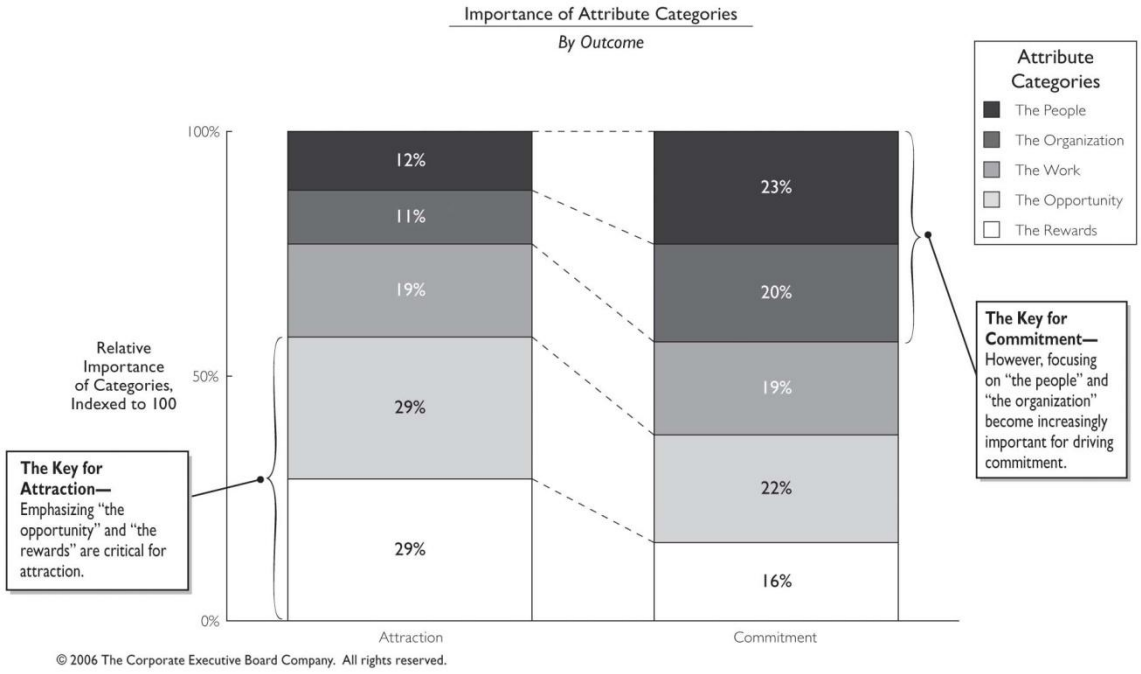


Figure 2: Importance of attraction and commitment attribute categories (Corporate Leadership Council, 2006b, p. 35)

In the Figure 2 the comparison is drawn between the attribute categories which are deemed most important in the prospective employee's decision to join the organisation, called 'attraction', and those which influence the employee to remain

with the organisation, called ‘commitment’. This study, conducted by the Corporate Leadership Council (2006b), indicates that the relative importance of the attributes ‘opportunity’ and ‘rewards’ are much higher in the employee’s attraction to the organisation decision and the proffered position, whereas the attributes ‘people’ and ‘organisation’ are much more important in the employee’s commitment to the organisation. This is indicative of the intangible factors influencing commitment, and the resultant retention of employees, and not necessarily the more traditional, tangible aspects of employee retention.

In considering the stay attitudes of employees, there is a differentiation to be made between engaged and disengaged employees. Both of these categories of employees may choose to remain with the organisation, but each group have different reasons for doing so. The Emerald Group Publishing Limited (2008a) highlights the differences between engaged and disengaged employees:

> “Engaged employees stay for what they give (they like their work); disengaged employees stay for what they get (favourable job conditions, growth opportunities, job security)” (p. 15).

This demonstrates that even disengaged employees may show some form of organisational commitment, and intention to stay with the organisation; however, this commitment may be artificial and short-lived.

The Corporate Leadership Council (2006b) proposes that employee commitment drives employee performance and retention. These three elements come together in a definition for engagement:

> “Engagement is the extent to which employees commit to something or someone in their organisation, how hard they work, and how long they stay as a result of that commitment” (Corporate Leadership Council, 2004, p. 4).

The Framework of Engagement proposed by the Corporate Leadership Council, and based on their definition, is reproduced in Figure 3. This framework illustrates

the relationships between organisational commitment, discretionary effort and performance, as well as intent to stay and retention.

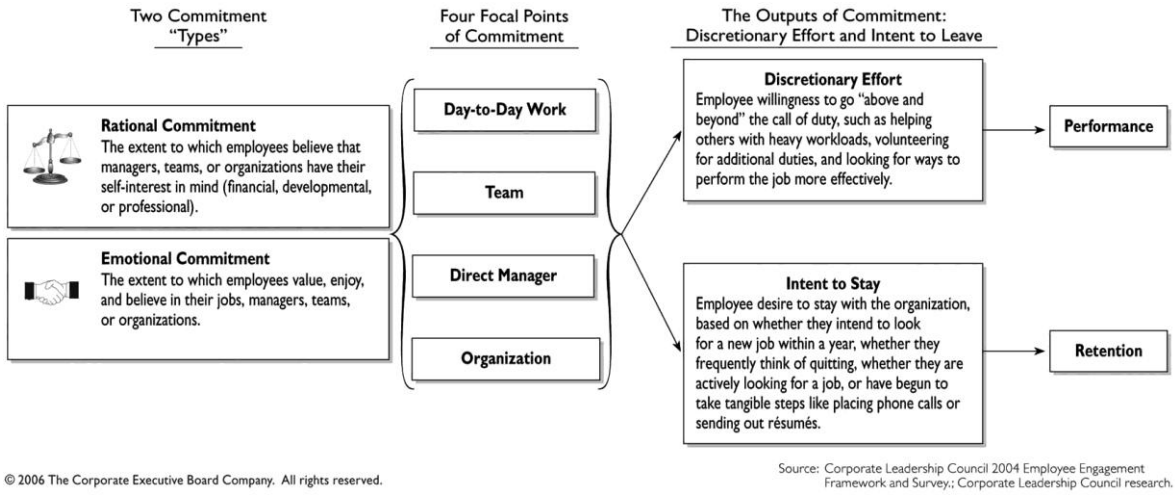


Figure 3: Corporate Leadership Council's framework of engagement (Corporate Leadership Council, 2004, p. 5)

The Corporate Leadership Council (2004) suggests two types of commitment as input to the framework illustrated in Figure 3:

- *Rational Commitment:* "the extent to which respondents feel that someone or something within their organisations provides financial, developmental, or professional rewards that serve their best interests" (Corporate Leadership Council, 2004, p. 6).
- *Emotional Commitment*: "the extent to which employees derive pride, enjoyment, inspiration, or meaning from something or someone in the organisation" (Corporate Leadership Council, 2004, p. 6).

These two commitment types and resulting engagement levers result in four focal points for commitment, as explained by the Corporate Leadership Council (2004): "Day-to-day work, team, direct manager, and organisation" (p. 5). These four focal points of commitment led to two outputs of commitment, namely:

- *Discretionary Effort*: "the respondent's willingness to expend effort beyond typical expectations" (Corporate Leadership Council, 2004, p. 6).

- *Intent to Stay*: “the extent to which respondents are either actively looking for another position or passively considering other opportunities, both of which will likely lead to actual attrition” (Corporate Leadership Council, 2004, p. 6).

‘Discretionary effort’ is an indicator of performance of the employee and ‘intent to stay’ is indicative of the retention level of the employee.

These inputs and outputs led to the definition of the 10:6:2 rule for the relationships between commitment, effort and performance:

> “… for every 10 per cent improvement in employee commitment, employees will realise a 6 per cent improvement in discretionary effort, which in turn results in a 2 percentile point improvement in performance” (Corporate Leadership Council, 2004, p. 26).

Besides the higher levels of commitment resulting in lower employee turnover rates, therefore, improved commitment is also critical for the improvement of performance for the organisation.

The Corporate Leadership Council’s (2004) Framework of Engagement also led to a rule for the relationship between commitment and turnover, defined as the 10:9 rule:

> “for every 10 per cent improvement in commitment, an employee’s probability of departure decreases by 9 per cent” (Corporate Leadership Council, 2004, p. 28).

Engagement, therefore, provides HR with a vital retention tool; in fact, failure to manage commitment levels will expose organisations to significant attrition risks.

From this study and resulting Framework on Engagement (Corporate Leadership Council, 2004), it can be seen that the successful management of employee commitment levels provides organisations with a powerful tool for driving employee performance and retention.

The global human capital consulting firm BlessingWhite (Emerald Group Publishing Limited, 2008a) confirm these relationships and offer the opinion that in order to be successful at employee retention, the organisations need to ensure that employee engagement is given top billing in the organisation, and not be treated as a once-a-year 'check-box' event. As Wickham and Fishwick (2008) advise, retention programmes aimed at increasing commitment, such as corporate work-life-balance initiatives, should not just be put in place to retain employees; the aim should be to get the employees to perform better by increasing engagement and commitment. This is especially true for initiatives such as a reduction in working hours – if an employee does not like their work, does not like being at work, then extra time off will not increase their feelings of engagement, as they will still have to be at work, albeit for a shorter amount of time, doing a job they hate.

In addition to organisational commitment, job satisfaction is also an important stay attitude when it comes to retaining employees. Chew and Chan (2008) use the concept of reciprocity or social exchange to position employee values, expectations and employee-company alignment (i.e. person-organisation fit) in terms of their importance to positive employee commitment and stay attitudes. Not only do employees feel the need for job satisfaction, but also a key area of satisfaction is that of job security. While job security is not guaranteed, or not even necessarily desired in today's IT landscape, the emergence of outsourcing and IT automation as alternatives especially in the current economic crisis, do fuel the sense of insecurity among IT professionals (Rethinam & Ismail, 2008). Also important in characterising job satisfaction are physical conditions that allow the utilisation of the employees' abilities and skills, putting in place an environment and values that make employees proud of working for the organisation, and fostering a sense of belonging (Rethinam & Ismail, 2008).

In an economic crisis, as has been the case world-wide for the preceding four years, it is particularly crucial to "manage the employment value proposition (EVP) to reengage your most critical talent" (Bohannon, 2008, p. 9), and the EVP, as described by the Corporate Leadership Council (2006a) is critical not only to

attraction, but to commitment and retention as well. The Corporate Leadership Council defines the employment value proposition as the:

> "… set of attributes that the labour market and employees perceive as the value they gain through employment in an organisation" (Corporate Leadership Council, 2006a, p. 6).

The employment value proposition, as illustrated by the Corporate Leadership Council (2006a, p. 6), is reproduced in Figure 4. The five 'core' EVP categories, as depicted at the centre of Figure 4 (Corporate Leadership Council, 2006a, p. 6), are the following:

- Rewards;
- Opportunity;
- Work;
- People; and
- Organisation.

This set of EVP categories is central to both the attraction of employees to the organisation, as well as the retention of the employees once they are already employed.

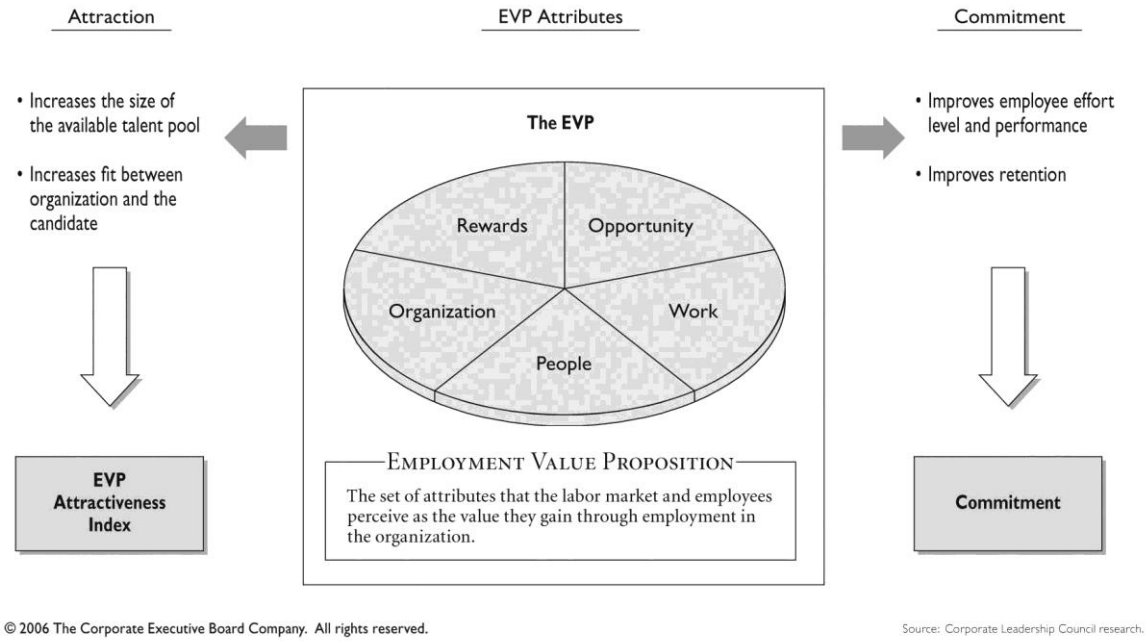


Figure 4: Corporate Leadership Council's EVP
(Corporate Leadership Council, 2006a, p. 6)

According to the Corporate Leadership Council, a competitive employment value proposition contains a core set of seven specific attributes, which fall into the EVP categories. These are universally important in both the attraction of new employees, as well as the retention of employees, and are applicable to both developing and developed economies. The seven core attributes are the following (Corporate Leadership Council, 2006a, p. 9) and are depicted in Figure 5:

- Compensation;
- Organisational stability;
- Development opportunities;
- Future career opportunities;
- Respect;
- Manager quality; and
- Collegial work environment.

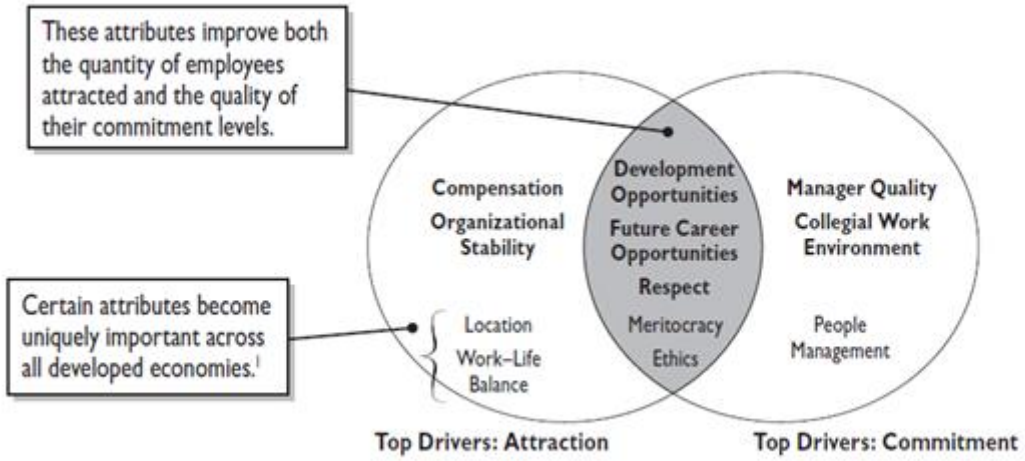


Figure 5: Core and developed economies' EVP Attributes
(Corporate Leadership Council, 2006a, p. 9)

As illustrated in Figure 5, compensation and organisational stability are particularly important in the attraction of new employees, while the quality of the manager and the work environment are major contributors in the retention of existing employees. Development and future career opportunities as well as respect are top drivers for both attraction and retention of employees. In addition to the seven core EVP attributes, the Corporate Leadership Council also define an additional five attributes (Corporate Leadership Council, 2006a, p. 9) that are uniquely important to attraction and commitment of employees in developed economies. These include 'location', 'work-life balance', 'meritocracy', 'ethics' and 'people management' and are also depicted in Figure 5. All of these factors identified by the Corporate Leadership Council as contributing factors to competitive employment value propositions are top drivers for employee attraction and retention and have been previously identified in the literature review. These are all contributing factors to the stay attitudes of employees.

To sum up the job satisfaction and organisational commitment aspects of employee engagement, global human capital consulting firm BlessingWhite (an organisation dedicated to creating sustainable high-performance organisations) have a very appropriate opinion on employee engagement:

> "Employee engagement is a complex equation that reflects each individual's unique, personal relationship with work. As such, there are limits to what organisations can do with broad-brush workforce processes or communication programs. At a macro level, you need to provide resources, tools, and the overall workplace environment that supports engagement. Ultimately, at a micro level, employees, with their managers' help, need to establish a thriving personal connection with their work and carve out a satisfying future in the organisation" (Emerald Group Publishing Limited, 2008a, p. 15)

2.3.9 *Leave attitudes*

> "… attitudes included intent to leave and actual turnover" (Mano-Negrin, 1998, p. 155).

This section focuses on the employee's leave attitudes towards the turnover decision.

When attempts at engagement fail, disengaged employees, with intent to leave result, and these employees are then those most at risk of turnover. Unfortunately, as Vardaman et al. (2008) state, the "ability to explain and predict individual voluntary turnover decisions remains limited" (p. 1532).

In the current global economic crisis, employees are experiencing unprecedented levels of job insecurity, despite the fact that IT professionals are still among those groups of employees that are relatively unaffected, due to existing skills shortages. Because of this state of the economy and resulting insecurities, employees are disengaging. Employers are also finding it difficult to justify expenditure on activities such as training and development, which traditionally have been available to engage and support staff (Bohannon, 2008). In addition, employers are actively pursuing the removal of non-performing staff. This state of affairs results in the disengaging of HIPO employees, which is precisely the opposite effect needed. Bohannon (2008) suggests that these over-burdened, disengaged employees need to have their employment value proposition actively

managed in order to reengage the organisation's most critical talent. Morgan (Emerald Group Publishing Limited, 2008b) also indicates his concern for this tendency to 'reward' high performers with more tasks, in their capacity as the go-to persons in the organisation. The manager may feel this demonstrates trust in the employee; however, this places the employee under additional stress, which will inevitably detract from the employee value proposition. It is imperative to keep staffing levels at an acceptable level and to distribute the workload evenly to ensure that staff, and in particular the HIPO employees, are not overloaded (Deery, 2008). The tendency to keep only the HIPO employees also makes it difficult for these employees to achieve a balance between work and life (Rethinam & Ismail, 2008).

A concerning statistic is that the number of highly disengaged employees more than doubled between the first half of 2007 and the end of 2008 (Bohannon, 2008). Unfortunately, many disengaged employees choose to scale back their own productivity rather than leave their current employers, creating substantial 'dead weight' for many companies. In these instances, it is especially critical for employers to look after their HIPO employees, making sure that they are appropriately and fairly rewarded for their high performance. Bohannon (2008) contests that high performers who outperform their peers form a long 'forward tail' in the skewed 'normal' distribution of employee performance, with average performers forming a tight cluster. The most important high-performing employees are therefore those that pose the greatest turnover risk. While these HIPO employees display greater discretionary effort (see Figure 6), these employees, as mentioned, are also those most likely to leave (see Figure 7).

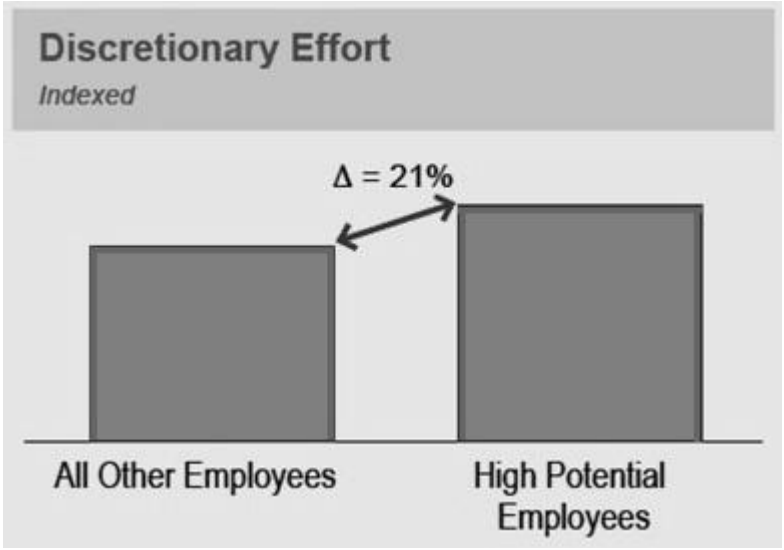


Figure 6: Discretionary effort

(Bohannon, 2008)

Figure 6 illustrates the difference in discretionary effort displayed by HIPO employees in comparison to other employees. This difference in discretionary effort amounts to a considerable 21 per cent.

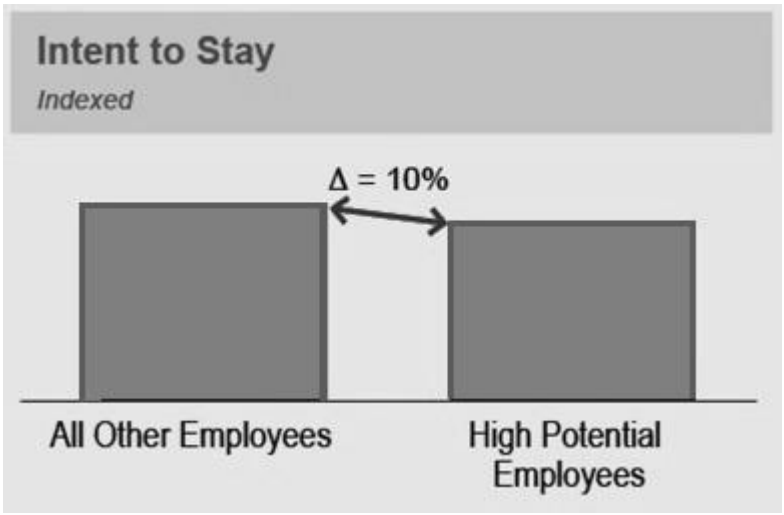


Figure 7: Intent to stay (Bohannon, 2008)

The fact that the high performing employees put in so much more effort than the non-HIPO employees, ultimately leads to higher levels of disengagement by these high performers, which, as can be seen in Figure 7, ultimately leads to a decrease of 10 per cent in intent to stay, over the non-HIPO employees.

Bohannon and the Corporate Executive Board (2008) estimate that the loss of a single HIPO employee translates into approximately a 4 per cent drop in company-level productivity. Wöcke and Heymann (2012) suggest that "push factors may play a greater role in poor performers than in high performers" (Wöcke & Heymann, 2012, p. 3493).

> According to the Corporate Leadership Council, and as discussed in the section on 'Stay attitudes', commitment drives retention (Corporate Leadership Council, 2004). The 10:9 rule defined by the Corporate Leadership Council (2004) states that:
>
> "… every 10 per cent improvement in commitment can decrease an employee's probability of departure by nine per cent" (Corporate Leadership Council, 2004, p. 29).

Employees with high levels of commitment are therefore significantly less likely to leave. Based on research conducted by the Corporate Leadership Council, Figure 8 illustrates that as employees move from the lowest level of commitment to the highest level of commitment, their probability of departure falls from 9.2 per cent to 1.2 per cent. This is indicative of a decrease in the probability of departure, in other words, a decrease in the probability of turnover by increasing commitment, of 87 per cent.

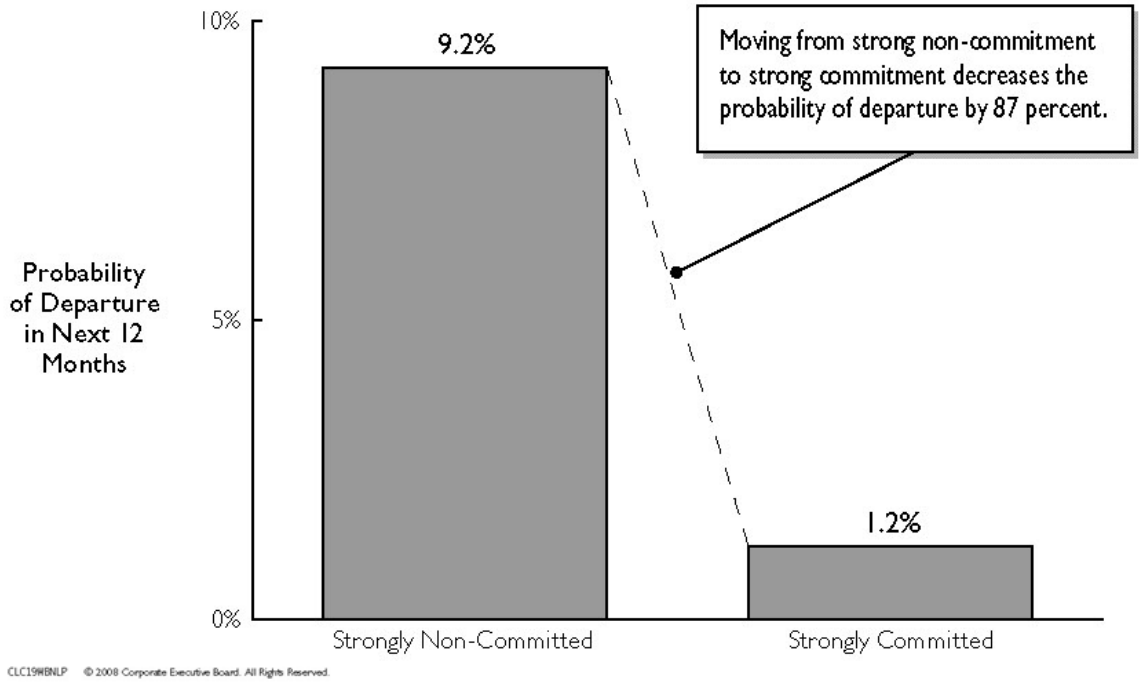


Figure 8: Maximum impact of commitment on the probability of departure (Corporate Leadership Council, 2004, p. 29)

In addition to managing the commitment of IT professionals, it is also critical to manage the physically demanding environments in which IT professionals operate. One of the physical demands of being an IT professional is the long hours associated, and more recently required, when working in the IT field, as well as the almost inevitable requirement to work standby hours. They are facing increasingly stressful environments that are also physically demanding (Rethinam & Ismail, 2008). This stress is often referred to as 'technostress', the symptoms of which include:

> "… physical and psychological conditions such as backache, uncertain tempers, ulcers, acne, insomnia, low morale and job-hopping" (Rethinam & Ismail, 2008, p. 61).

This 'technostress' can also lead to exhaustion and burnout, which is physically dangerous to the employee and detrimental to the organisation (Salanova, Llorens, & Cifre, 2012; Sethi, King, & Quick, 2004; Shropshire & Kadlec, 2012).

Organisations should utilise all of the tools at their disposal in order to reduce turnover and manage commitment among their IT professionals. One particular resource available to employers to determine the reasons for turnover is the use of exit interviews. Unfortunately, as alleged by Eldridge (2008), while 57 per cent of employers use this resource, only half of these actually analyse this data to determine if there are any patterns. Eldridge (2008) suggests therefore that the exit interview process is nothing more than a check-box confirmation. Lanigan (2008) also suggests that exit interviews are one of the key methods for determining why employees resign. In addition, it is suggested that only 7 per cent of employers (Eldridge, 2008) consider redesigning job specifications to make them more satisfying, based on feedback received in the exit interview process. These statistics are concerning and indicative of organisations wasting the information gathered through this process.

> "Identifying and addressing workforce dissatisfaction demonstrates to your workforce care and insight into their situation" (Emerald Group Publishing Limited, 2008b, p. 7).

It is therefore vitally important for the organisation to take all the available cues of dissatisfaction into account and use them constructively in addressing the reasons for such dissatisfaction, and ultimately addressing the leave attitudes.

2.3.10 *External Influences*

These include factors beyond the employee's control, such as shock events (including the recent global economic pressures), unsolicited approaches, labour market influences, and South African-specific issues.

While the previous sections focused more on the internal push factors encouraging employees to consider voluntary turnover and ultimately consider severing the retention bond, this section focuses more on the external influences, also called pull factors, at play in employee retention.

As mentioned previously in this section, knowledge workers, which include the subset of IT professionals, no longer show the degrees of loyalty to their employers as their parents did before them. This may be due to the nature of knowledge work, but may also be influenced by pervasive corporate downsizing (Vardaman, et al., 2008), especially in an economic downturn. IT professionals are loyal to their careers and as such should manage these careers, included in which is the management of the risks associated with individual decisions, such as the decision to leave (Vardaman, et al., 2008). This implies a fundamental shift in the employee's psychological contract, from a relational contract "based on trust and loyalty to the company" (Scholarios, et al., 2008, p. 1036)) to one transactional in nature, a "relationship of limited duration, focused on economic exchange and limited worker involvement in the organisation" (Scholarios, et al., 2008, p. 1036).

> "The reduction of loyalty under the new labour contract and the increased proportion of generally-valued skills in computer-based systems suggest that IT workers would have higher turnover rates than other professions" (Morgan, et al., 2004, p. 104).

Niederman et al. (2006, p. 131) and Lee, Mitchell, Holtom, McDaniel, and Hill (1999) argue that:

> "… turnover is influenced sequentially by a set of variables, starting with a shock, and followed by a script, an image violation, some level of job satisfaction, and search/evaluation of alternatives" (Lee et al., 1999, p. 451).

Such shocks are specific, jarring events that initiate the turnover process (Niederman, et al., 2006). These include unsolicited job offers or opportunities, as well as more pervasive issues such as the global economic downturn experienced over the last four years.

Sanjay (2006) maintains that factors, such as unemployment rate, job growth and the existing labour pool, that are outside of the control of the organisation, can be directly related to retention. Where there is a skills shortage, such as is often the

case among IT employers, even in an economic downturn, there is a high prevalence of pull factors, such as employee poaching, offering HIPO employees incentives to leave their current organisations (Sanjay, 2006). It is therefore critical to put in place retention programmes that work and address the critical requirements of IT professionals. In research conducted by Flood et al. (2001), they found that the link between job satisfaction and turnover to be weakened by prevailing labour market conditions.

Wöcke and Sutherland (2008) identify three specific areas of psychological contracts and attitudes towards the social transformation regulations where legislation in South Africa has had an effect:

> "… [employee] loyalty to stay with their organisations, the focus on [employee] career development in terms of the external labour market and the degree to which [employees] felt they had been affected by the legislation" (Wöcke & Sutherland, 2008, p. 528).

2.4 Conclusion of literature review

The preceding literature review highlights the current state of retention strategies and antecedents to voluntary employee turnover. As indicated by this literature, there are as many and varied opinions on the subject of employee turnover and retention as there are people studying and writing on the subject. These vary from the very basic, self-confident and emphatic statements that there is only one antecedent to turnover, a silver bullet if you like, to the very varied, broad and elaborate models taking into account vast numbers of variables and attitudes to arrive at sometimes less than convincing conclusions. The purpose of this literature review was not to attempt to find any retention silver bullet; neither was the intention to uncover the perfect retention model. The purpose was to provide insight into the area of study that encompasses employee retention and turnover, by making a number of these opinions available to the reader in order for the reader to have a broad understanding of the variables at play in this field and to form their own opinions on the subject. In addition, the literature presented forms

the basis for discussions on the results obtained in conducting this research report, in the following chapters.

Knowledge workers form a very specific category of employee and are increasingly important to organisations for the knowledge and skills that they possess. It is therefore critical that these individuals, particularly the high-performing ones, are encouraged to remain with the organisation voluntarily, in an engaged manner, to avoid the organisation's knowledge source from leaving with the employee. IT professionals, as a unique subset of knowledge workers, are as critical to their organisations as knowledge workers and have many of the same unique requirements when it comes to retention, as their knowledge worker counterparts, as well as a number of additional unique attributes and requirements that require special attention. Factor into the equation the dawn of the so-called 'millennials' (generation Y employees) entering the workplace and the requirements are unlike those ever experienced before. It is now more than ever critical that HR departments and management interact with employees to understand these requirements and make sure they are catered for in the HR processes and procedures as well as daily interactions to mitigate the risks associated with employee turnover, and not presume to understand the subtle nuances in the retention equations of these employees.

The foundation of the literature review was built around the attitudinal constructs identified and documented by Mano-Negrin (1998), namely environment, returns, supervision, enrichment, feedback, organisational career prospects, stay, and leave. In addition to these eight constructs, one was added upfront, as the need to recruit the most suitable employees for the job, and additionally one was added at the end, specifically relating to external influences, regarding conditions in the South African environment and workplace, in the staff turnover decision.

The recruitment process is the first phase in the retention of key employees and should not be overlooked as inconsequential. The first aspect of recruitment to be aware of when hiring for long-term commitment is the fit of the prospective employee to the organisation. It is important that the values of the organisation resonate with the employee's own values. A second recruitment practice, which

results in lower levels of turnover down the line, is that of employing based on referrals from existing employees. Referrals from engaged employees may lead to more engaged employees entering the organisation through this practice. The third recruitment challenge is that of the relatively new and unknown art of attracting the generation Y employees.

The primary focus of the literature review for this research study was to emphasise the various factors involved in the retention of IT professionals. As mentioned, the basis for this focus originated from eight attitudinal constructs appropriate for defining staff retention, identified by Mano-Negrin (1998). The first construct focused on 'environment', which entailed the "satisfaction with work arrangements, work load, physical accommodations, schedule flexibility [and] work conditions" (Mano-Negrin, 1998, p. 155). The environment in which employees find themselves working was identified as a critical success factor in retaining employees. This was found to be especially applicable to women, IT professionals, knowledge workers and generation Y employees. The accommodation by management of flexible work arrangements, such as telecommuting, flexible scheduling and leave flexibility, were all found to contribute to an environment conducive to organisational productivity and overall employee happiness. An effective work environment meets the organisational and employee's personal needs and values, which in turn:

> "… promote[s] health, well-being, job security, job satisfaction, competency development and balance between work and non-work life" (Rethinam & Ismail, 2008, p. 60).

The most critical of these elements was identified as the need for work-life balance.

The second construct focused on 'returns (reward and recognition)', which entailed the "importance given to salary, pension funds, non-monetary benefits and career prospects" (Mano-Negrin, 1998, p. 155). Financial reward is no longer the primary, singularly important retention factor many HR departments used to (and still do) believe it to be. Many 21st century employees, and very definitely the

generation Y employees are looking for something more meaningful in their careers and while money is still seen as one of the more important elements in retaining employees, it is often the more intangible benefits, including adequate, appropriate recognition, that drive retention.

The third construct focused on ‘supervision’, which entailed the “satisfaction with supervisor, cooperation, autonomy, boss-caring” (Mano-Negrin, 1998, p. 155). This construct ties in with the ‘recognition’ requirement for employee retention, as honest and open communication with direct line managers would lead to the required, relevant recognition. It is vitally important for management to engender trust in their direct reports, as well as to provide sufficient encouragement and support for the people that are under their supervision. Management needs to empower employees with the right tools, skills and adequate faith to allow the employee to do what they do best, as well as allowing them the autonomy to get on with the job at hand without constant micro-management or the fear of recrimination when not everything goes according to plan. Autonomy in the workplace is particularly critical in retaining generation Y and IT employees and it is therefore in the managers best interest to understand how best to balance autonomy with the requirement to get the job done in the most appropriate way, in order to satisfy the retention requirement or appropriate supervision.

The fourth construct focused on personal ‘enrichment (employability and personal growth)’, which entailed the “importance given to learning new things, taking courses” (Mano-Negrin, 1998, p. 155). This requirement is possibly one of the most critical both in terms of the IT professional, as well as the organisation. Not only is it important for the IT professional to maintain a certain level of skills for the sake of their own career, it is also critical for the organisation to have in their employ, employees who can take advantage of the constantly evolving technological requirements in the IT environment. In order for this to happen, the organisation needs to make sure that the employee is constantly re-skilling and keeping their knowledge of the cutting edge developments up to date. Organisations should guard against cutting training costs and budgets in the short term, as the long-term repercussions may be dire, in terms of an inability of the

organisation to keep up with the industry in which they operate. Employers providing opportunities for gaining technical expertise, and allowing employees the latitude to grow personally are able to reap the benefit of the initial training outlay in a reciprocal manner. This happens by the employers being the recipients of the application of the newly acquired knowledge, having a more productive work environment, and by receiving a certain level of employee commitment to the organisation – more so than they would receive were they not to provide these personal and professional development opportunities.

The fifth construct focused on 'feedback (communication and involvement)', which entailed "importance given to getting specific instructions, being informed [and] being appreciated" (Mano-Negrin, 1998, p. 155). Adequate feedback has its roots in open and honest relationships with direct management, which ties back to the requirement for adequate supervision mentioned previously. IT professionals need to feel involved in the organisation, to feel their suggestions are being considered, and that they are appreciated in the organisation (Luftman, 2008). They need to feel that their efforts and contributions are recognised (Chew & Chan, 2008). These feelings of involvement and constant endorsement, achieved through consistent feedback, foster loyalty and engagement in the organisation. In addition, there is a need for alignment between the employee's targets and goals, and those of the organisation. In order to retain employees and specifically good IT professionals, they need to feel actively involved in the organisations for which they work. Through communication of the bigger organisational picture, the IT professional is able to see how their effort is being applied to further the organisation's goals and vision.

The sixth construct focused on 'organisational career prospects', which entailed the "evaluation of organisational career opportunities, departmental opportunities [and] internal labour markets" (Mano-Negrin, 1998, p. 155). Constant and immediate communication and feedback from direct line management needs to be honest and open and indicate a certain level of the manager's personal interest in the employee's career growth within the organisation. Knowledge workers, and IT professionals in particular, like to know that they are actually progressing in their

careers within the organisation, and if they are not convinced that this is the case, they will move on in order to progress elsewhere (Ferratt, et al., 1999). Personalised career planning for each employee, especially for HIPO IT professionals, is required in order to carve out a unique place for each individual in the organisation and to influence retention positively.

The seventh construct focused on ‘stay attitudes’, which entailed the “attitudes, [which] included overall job satisfaction and organisational commitment” (Mano-Negrin, 1998, p. 155). The provision of all of the aforementioned constructs in the employment relationship is a strong indication that employee intentions to stay will be greater. The literature referenced indicates the strong correlation between organisational commitment and intent to stay, with highly engaged employees being more committed to the organisation, putting in more effort into their daily tasks, and thereby noticeably improving their performance. In addition, the research discussed previously proposes that the successful management of employee commitment levels and the employment value proposition provides organisations with a powerful tool for driving employee performance and retention.

The eighth construct focused on ‘leave attitudes’, which entailed the “attitudes, [which] included intent to leave and actual turnover” (Mano-Negrin, 1998, p. 155). The lack of the aforementioned constructs in the employment relationship is a strong indication that employee intentions to leave will be greater. When attempts at the engagement of employees fail, disengaged employees, with intent to leave, result and these employees are then those most at risk of turnover. Currently, due to the globally depressed economies, many employees are disengaging, but are not intending to leave, due to poor job prospects, even in the IT sector. The resultant loading of HIPO, engaged employees with additional tasks results in their disengaging in turn, however, these employees will not necessarily remain with the organisation. The turnover of a single HIPO employee results in a huge loss for the organisation in the form of a drop in organisation-wide productivity, which should be avoided at all costs. Organisations should also be prepared to learn from their mistakes, and there is no more an ideal opportunity to do this,

than in analysing their exit interview data and using it to improve the employment value proposition and ultimately to curb unnecessary turnover.

The final, additional construct focused on in this literature review is ‘external influences’. These include factors beyond the employee’s control, such as shock events, unsolicited approaches, labour market influences, and South Africa-specific issues. While the previous constructs related more to the internal push factors encouraging employees to consider voluntary turnover and ultimately consider severing the retention bond, this construct focuses more on the external influences, also called pull factors, at play in employee retention. Sanjay (2006) maintains that external factors, such as unemployment rate, job growth and the existing labour pool, that are outside of the control of the organisation and the employee, can be directly related to retention. This is specifically applicable in the South African context. Where there is a skills shortage, such as is often the case among IT employers, even in an economic downturn, there is a high prevalence of pull factors, such as employee poaching, offering HIPO employees incentives to leave their current organisations (Sanjay, 2006). These are often unsolicited and predominantly beyond the control of the organisation. Legislation, whether perceived positively or negatively, also has an effect on the retention of employees, by either forcing them to remain with an organisation, or offering them unprecedented opportunities in leaving the organisation.

All of the former attitudinal constructs play an important role in the retention of employees, and specifically in retaining IT professionals. Many of these are interlinked and implementing certain corrective measures may have the effect that a number of these attitudinal requirements are addressed at the same time. It is however vitally important for organisations to be open to the retention requirements of their employees in the 21st century. In order to accomplish this, though, they need to first listen to their employees and not assume that the historic HR practices are still applicable.

In order to align with the research study undertaken by Gaylard (2004), the objectives of this research study correspond to those stated by Gaylard (2004), which are essentially the following:

- The variables, which most contribute to the retention of IT professionals;
- The extent to which the traditional retention variables influence IT professionals' decision to remain with a company;
- The factors (themes underlying the variables) which most contribute to the retention of IT professionals;
- Any significant relationships between an IT professional's intention to leave an organisation and their demographic attributes; and
- The biggest 'gaps' in the provision of the retention variables, in the sample surveyed (Gaylard, 2004, p. 50).

The following research propositions have been extracted from the aforementioned objectives and are based on the restated research propositions presented by Gaylard (2004, pp. 51-54):

2.4.1 *Research Proposition 1*

The most important retention themes that influence an IT professional's decision to remain with an organisation are:

- Work/home balance;
- Well-developed interdependence with other colleagues;
- Clear and open communication channels with direct management;
- Performance-related financial reward; and
- A performance-enabling environment.

2.4.2 *Research Proposition 2*

The traditional retention variables such as the list that follows will have little influence on an IT professional's decision to remain with an organisation:

- Job security;
- Loyalty;
- Share options;
- Pension/provident scheme; and
- Health care benefits.

2.4.3 *Research Proposition 3*

The variables that have the most influence on IT professionals' decisions to remain with an organisation may be meaningfully grouped by factor analysis into the following six factors:

- *Factor 1*: Equity and enablement for high performance;
- *Factor 2*: Liberated and empowered culture;
- *Factor 3*: Effective and interactive communication channel;
- *Factor 4*: Environment rich in personal growth opportunities;
- *Factor 5*: Standard employment contract benefits; and
- *Factor 6*: Social interaction.

2.4.4 *Research Proposition 4*

There is a moderately-strong inverse relationship between IT professionals' level of job satisfaction and their intention to leave an organisation. In addition, there is no relationship between an IT professional's intention to leave an organisation and each of the following demographic categories:

- Current employer;
- Race;
- Gender;
- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained; and

- Current level of expertise.

2.4.5 *Research Proposition 5*

The sample of IT professionals found the biggest ‘gaps’ in the provision of retention variables to fall into the following five themes:

- Performance-related financial reward;
- Job security;
- Training and opportunities for personal growth;
- Tools to enable high performance; and
- Clear communication between management and employees.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that was followed in order to address the five research propositions raised in the literature review chapter, which in turn refine the research problem defined in Chapter 1, namely 'to identify the primary retention factors that South African IT professionals, and in particular, IT professionals in the South African financial services sector, perceive to influence their voluntary turnover intentions (stay/go intentions)'.

The beginning of this chapter defines the method of research, as well as the research design that was followed. This formal study used a quantitative method with survey questionnaires to gather the data. The population, as alluded to in the problem statement is all IT professionals in the South African financial services sector, from which a convenience sample was drawn from sixteen organisations in this sector. The instrument that was used was based on one that resulted from research conducted by Gaylard (2004). This instrument was altered slightly to include additional demographic questions pertinent to this particular study. The core 50 statements were left unchanged. The internet link to the finalised research instrument was distributed via email to the sample, which presented each respondent with an online questionnaire (reproduced in a document-friendly manner in Appendix B).

Following the details of the data collection, the methods of analysis for each research proposition are presented. Thereafter limitations of the research are discussed and in the final section the levels of validity (both internal and external) and reliability inherent in this study are presented along with the strategies and techniques used to maximise both.

3.2 Research methodology /paradigm

The research methodology that was selected for this research was a formal, descriptive, quantitative paradigm. A definition of quantitative research is given by Leedy and Ormrod (2005):

> "Quantitative research is used to answer questions about relationships among measured variables with the purpose of explaining, predicting, and controlling phenomena" (p. 94).

According to Leedy and Ormrod (2005, p. 179), descriptive research "examines a situation as it is". In addition, Welman, Kruger and Mitchell (2005, p. 23) state that descriptive research has two goals: Firstly, "to explain phenomena by indicating how variables are related to one another and in what manner one variable affects another"; and secondly, "the possibility of explaining and predicting human behaviour [which] may enable us to change or control it". The aim of this research initiative was to identify the current important retention variables among South African IT professionals in the financial services sector by addressing the research propositions posed. The resultant data received from the research therefore was used to extrapolate various responses to the research propositions posed by this research. This quantitative approach to the research problem is appropriate in that the outcomes resulting from the analysis as presented in this research will assist organisations in explaining, predicting, and putting in place measures to curb, turnover among IT professionals.

Leedy and Ormrod (2005, p. 96) suggest that in answering the following five questions it becomes apparent whether the descriptive, quantitative methodology for any study is appropriate or not.

1. What is the purpose of the research? The answer in the context of this research is: *To explain and predict.*

2. What is the nature of the research process? The answer in the context of this research is: *Focused with known variables and pre-determined methods where the researcher has a detached view.*

3. What are the data like and how are they collected? The answer in the context of this research is: *Numeric data with a standardised instrument.*

4. How are data analysed to determine their meaning? The answer in the context of this research is: *Statistical analysis with deductive reasoning to reach conclusions.*

5. How are the findings communicated? The answer in the context of this research is: *Statistics and aggregated data.*

Each of the questions was answered in the context of this research and the answers (in *italics*) show the distinguishing characteristics that indicate that this descriptive, quantitative methodology is indeed appropriate for this research study.

In addition to this methodology, it should also be noted that this study took the form of a comparison study to the research performed by Gaylard (2004), and published by Gaylard, Sutherland and Viedge (2005). While this study could be referred to as a replication of the original Gaylard (2004) research, the researcher has chosen to label this a comparison study to reinforce one of the main objectives of this study, that being to compare the results obtained with those obtained eight years ago by Gaylard (2004). In addition, this research is methodologically different from the original Gaylard (2004) study in the different data analysis techniques used in the reanalysing of the original Gaylard (2004) data and in the analysis of the data gathered for this study.

3.3 Research design

A survey using indirect data sources (namely questionnaires), involving measurements at a single time, was used as the design for this non-experimental research. Leedy and Ormrod (2005) define survey research as:

> "Survey research involves acquiring information about one or more groups of people – perhaps about their characteristics, opinions,

attitudes or previous experiences – by asking the questions and tabulating their answers" (p. 183).

While survey research is temporal, and its broad-spectrum extrapolation beyond the instant and specific context within which the data are collected is purely speculative (Leedy & Ormrod, 2005), allowing for potentially one-sided interpretation, it does provide the researcher with the advantage of, and opportunity to, infer results for a broader population, within the limitations of the sampling method. In the case of this particular research, survey research enabled the collection of data for a specific context and scenario, namely that of the turnover intentions and feelings towards retention strategies (both existing and preferred) of IT professionals currently employed within the financial services sector in South Africa.

In addition to the previously mentioned disadvantage of the purely speculative nature of the inferences that can be made from the survey method, this method also has another drawback in that researchers have to rely on the accuracy of the "self-report data" (Leedy & Ormrod, 2005, p. 184) whereby the responses do not necessarily accurately reflect the respondent's attitude. This leaves the survey open to a number of unfavourable response possibilities (Leedy & Ormrod, 2005, p. 184):

- Respondents indicate what they believe to be true; or
- Respondents indicate what they believe the researcher wants to hear; or
- Respondents' recollection of events may be distorted; or
- Respondents may make up their responses on the spot, with no real grounding for their responses; or
- Respondents may intentionally misrepresent their opinions for a number of positive or negative reasons.

In this particular research, it was favourable for the respondent to answer the questions based on their current attitudes towards the statements, which

bypassed the instances of recollection problems and making up answers on the spot, which could be seen to be unfavourable – these are in fact favourable response characteristics in this particular study. The remaining unfavourable response possibilities could in part be negated by the choice of survey technique, such as the choice of using a questionnaire to encourage honesty of responses by ensuring anonymity for the respondent.

The survey technique used for this particular research study took the form of a questionnaire. One advantage of the questionnaire over other survey techniques (such as interviews) is that the respondents may respond more truthfully than for example in interview surveys due to the anonymity associated with questionnaires (Leedy & Ormrod, 2005). The approach taken in this particular research, where the respondent replied directly to the researcher by means of a website where only the researcher had access, ensured that the responses didn't go through any other human conduit before reaching the researcher, thus ensuring a level of anonymity or in some instances, responses known only to the researcher. The one particular disadvantage of the questionnaire technique as a method of survey research, is that of a strong likelihood of a low return rate (Leedy & Ormrod, 2005, p. 185). This risk was mitigated by using convenience sampling as well as approaching the majority of respondents from the researchers own organisation and child organisations, thereby enabling the researcher to drive the response return rate from their position of authority.

In addition, a questionnaire that has not been validated in the population in which it is to be used may lead to misinterpretation of questions by the respondents (Leedy & Ormrod, 2005) resulting in potentially skewed results and the possibility of invalid conclusions. This risk was negated by selecting a previously validated questionnaire (presented in Appendix B), with the only changes being the addition of demographic questions applicable to a survey being conducted in multiple organisations within one country, with potentially differing demographics.

The previously validated questionnaire used (Gaylard, 2004) for this study made use of rating scales, also called Likert scales, in order to facilitate the evaluation and quantification of the survey (questionnaire) responses. "A rating scale is more

useful when the phenomena of interest needs to be evaluated on a continuum" (Leedy & Ormrod, 2005, p. 185). The number of options given to the respondent for each statement should be carefully evaluated, as a neutral response may have certain undesired consequences (Leedy & Ormrod, 2005). The scale from the previously validated questionnaire was left unchanged. The scale used by Gaylard (2004) in his questionnaire consisted of a verbal ordinal scale of ratings from zero (not at all) to 10 (completely) for each of the voluntary-turnover statements (in Section 2 of the questionnaire), for each of the two survey questions in the section.

3.4 Population and sample

3.4.1 *Population*

The population targeted through this study included all IT professionals in the financial services industry in South Africa. The definition given in Section 1.6, 'Definition of terms' for this industry, and the corresponding over-arching sector, the financial services sector, endorses the sub-sectors identified for this study namely insurance, banking and capital markets, and asset management (Winterboer, 2012). In a recent skills survey conducted in 2011 by the JCSE together with the Computer Society of South Africa and ITWeb (Schofield, 2011), the findings indicated that almost half of all IT professionals work outside of the ICT sector, and more specifically, that a total of 17 per cent of IT professionals work within the realm of the financial services sector. Nine per cent work in the banking sector, four per cent in the Insurance sector and another four per cent in the financial and accounting services sector.

3.4.2 *Sample and sampling method*

The sample chosen from the population for this study consisted of IT professionals that were employed in sixteen financial services companies in South Africa. These financial services companies included seven companies from the long-term insurance sector, six major South African banks, one company from the

investments sector and two short-term insurance companies (see Table 2). An optional category for 'other' was also included as an option in the questionnaire.

Table 2: Financial services organisations targeted

Financial services organisation	Financial services sector category
1LifeDirect	Long-term Insurance Sector
ABSA Bank	Banking Sector
Clientele Life	Long-term Insurance Sector
Discovery Group Life	Long-term Insurance Sector
Discovery Insure	Short-term Insurance Sector
Discovery Invest	Investments Sector
Discovery Life	Long-term Insurance Sector
First National Bank	Banking Sector
Investec	Banking Sector
Liberty Life	Long-term Insurance Sector
Momentum	Long-term Insurance Sector
Nedbank	Banking Sector
Other	Any
Outsurance	Short-term Insurance Sector
PruProtect	Long-term Insurance Sector
RMB	Banking Sector
Standard Bank	Banking Sector

These sample companies were chosen by virtue of personal relationships the researcher had with certain of the employees of these organisations and involved the respondents' self-selection into the survey after receiving the request to participate. This convenience sampling method was extended to the samples within the majority of these organisations where the invitation to participate was forwarded on by the contacts targeted in these organisations. The resultant

convenience sampling methods also resulted in the respondents coming from the Gauteng province only.

In addition to the aforementioned convenience sample, the entire IT professional micro-population was chosen from the five organisations making up the financial services organisations within the Discovery holdings group. Every IT employee was requested to participate in the survey. The position of authority held within the researcher's own organisation enabled the researcher to use the contact details of each potential respondent within this holdings company (including only the individual companies that make up the financial services portion of the whole organisation) to enable follow-up requests by means of the online data-gathering tool thereby increasing the response rate.

While this method of sampling has the advantage of being convenient, to which the name alludes, this form of non-probability sampling has the drawback that the researcher is in no way guaranteed that the resultant sample is representative of the population (Leedy & Ormrod, 2005). In fact, Leedy and Ormrod (2005) put it very concisely when they state: "A sample is no more representative of the total population than the degree to which it has been randomly selected" (p. 199). The rationale behind the use of non-probabilistic, convenience sampling method in addition to the use of the full micro-population of the Discovery holdings company, for this particular research is that IT professionals, and financial services employees, as subsets of knowledge workers, form a relatively homogenous grouping (Kinnear, 1999). As such, convenience sampling and this micro-population sampling may indeed be representative of the population, given that the questionnaires were being distributed randomly to the IT professionals in the various organisations, and those returned would be assumed a random sample of those distributed.

The initial sample targeted approximately 453 IT professionals in the sixteen organisations. A varied rate of return was expected, and depended on the sphere of influence the researcher had in the various organisations. A higher rate of return was therefore expected from all the organisations belonging to the Discovery holdings group of companies due to the researcher's high influence

over the returns in these organisations. The remainder of the returns were dependent on the influence exerted by the researcher's contacts over the targeted respondents in the balance of the organisations, and as such, the expectations were low. Because the responses came back to the researcher directly through results from the online survey tool, confidentiality was guaranteed, this encouraged participation in the survey.

Table 3 indicates the size of the sample in each of the sixteen target organisations, as well as the expected returns from each. The actual number of returns finally received is also indicated. This table shows the differences in response rate expectations for each organisation, as well as ultimately the relatively low response rate in the organisations where the researcher has little influence.

Table 3: Sample size and expected versus actual returns

Financial services organisation targeted	Number sampled	Expected returns	Actual returns
1LifeDirect	10	2	0
ABSA Bank	10	2	3
Clientele Life	10	2	0
Discovery Group Life	28	15	9
Discovery Insure	24	15	24
Discovery Invest	46	30	24
Discovery Life	140	125	130
First National Bank	10	2	0
Investec	20	10	6
Liberty Life	15	2	5
Momentum	10	2	0
Nedbank	10	2	2
Other	15	2	5
Outsurance	10	2	0
PruProtect	55	40	31
RMB	10	2	3
Standard Bank	30	20	17
Total	**453**	**275**	**259**

3.5 The research instrument

3.5.1 *Selection of the research instrument*

The research instrument used to conduct this research took the form of essentially the same research instrument, namely a questionnaire, created by Gaylard (2004) in researching 'the factors influencing the retention of IT workers', with the addition of a number of pertinent demographic questions. The Gaylard (2004) data and

analysis formed the basis of the paper: ‘The factors perceived to influence the retention of IT workers’, published in the South African Journal of Business Management (Gaylard, et al., 2005).

The reason for selecting the same research instrument as that constructed by Gaylard (2004), was primarily due to this research study being a comparison study to the one conducted by Gaylard (2004). In addition, this instrument had been shown in Gaylard’s research (2004) to be valid and reliable for the population of IT workers, and as mentioned earlier had formed the basis of a published paper on the subject of the factors perceived to influence the retention of IT workers (Gaylard, et al., 2005), which mirrors the purpose of this study. The selection of this previously constructed instrument was therefore appropriate for this research.

3.5.2 *Construction of the questionnaire*

In constructing a questionnaire, Leedy and Ormrod (2005) suggest the following twelve guidelines (Leedy & Ormrod, 2005, pp. 190-192) which encourage co-operation from the target sample, as well as result in usable and interpretable response data:

- Keep it short;
- Use simple, clear, unambiguous language;
- Check for unwarranted assumptions implicit in your questions;
- Word your questions in ways that do not give clues about preferred or more desirable responses;
- Check for consistency;
- Determine in advance how you will code the responses;
- Keep the respondent’s task simple;
- Provide clear instructions;
- Give a rationale for any items whose purpose may be unclear;
- Make the questionnaire attractive and professional looking;
- Conduct a pilot test; and

- Scrutinise the almost-final product carefully to make sure it addresses your needs (Leedy & Ormrod, 2005, pp. 190-192).

Despite the fact that a pre-validated questionnaire was used for this study, it was still important to confirm that the suggested guidelines could be applied in the context of the current research. The target audience and intended respondents were IT professionals. These individuals are assumed to be at a high level in terms of cognitive function and language skills. It was therefore expected that the respondents to the survey would not have a problem with a basic understanding of the English language, nor would they have a problem with the understanding and completion the task of answering the questionnaire. It was nevertheless imperative that the task be kept as simple as possible and the instructions be made as clear as possible because the one guideline that was difficult to follow in this specific research, in using a pre-defined instrument, was to keep the questionnaire short. In order to encourage each respondent to complete the questionnaire, everything possible had to be done to make the task as quick and easy to complete as possible. This included the ease of use of the technology.

The consistency in this questionnaire was not in question, as the subject matter of the study and consequently the questionnaire, was not of the sort that would motivate respondents to give answers that were anything other than the truth. This was also addressed in Section 3.2 on research design and possible unfavourable responses. The wording of the core questions and statements did not change from the original questionnaire, and as such, there was no difference in any implicit assumptions or bias towards specific answers from the previous survey conducted by Gaylard (2004). Using an online data-gathering tool enabled the inherent coding of responses and provided an attractive and professional platform on which to build the questionnaire.

In the original questionnaire design undertaken by Gaylard (2004), a three-step process was followed in order to produce a viable questionnaire. This included piloting the questionnaire, which is one of the important guidelines and activities in constructing a questionnaire.

The preceding suggested guidelines were, in the main, found to be applicable to, and appropriate for, the current research and the use of the Gaylard (2004) questionnaire.

Gaylard (2004) followed a three-step process in constructing the final tested questionnaire used in his research. This process is illustrated graphically in Figure 9. The initial, preliminary questionnaire was formulated using only the literature as input. This preliminary questionnaire was then put to a number of IT workers to verify all the retention variables from the literature and to add any additional variables; those that aligned with the factors proposed as well as any that did not align (were unaligned) with any of the proposed factors. Once all the variables were deemed correct, the questionnaire was distributed electronically to a small sample as a pilot test. This was done in order to both test the usability of the electronic version of the questionnaire from a technology perspective, as well as to confirm that the requirements for an effective questionnaire were met, namely: “clarity, lack of ambiguity and whether the questions actually solicit the information required” (Gaylard, 2004, p. 66).

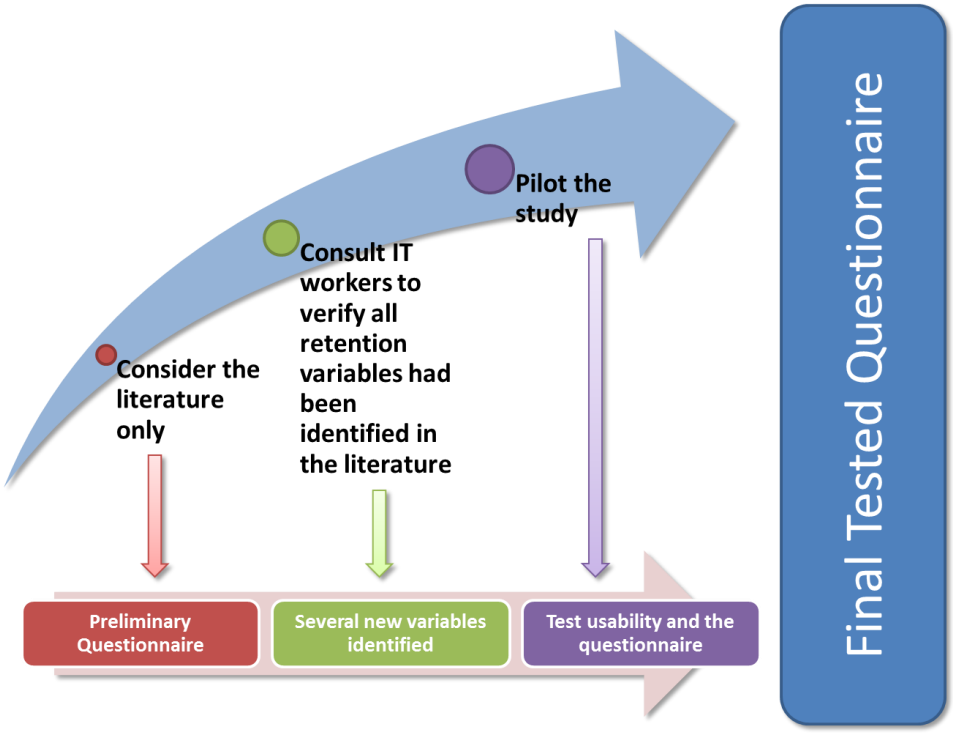


Figure 9: Interpretation of the Gaylard questionnaire design method (Gaylard, 2004)

Leedy and Ormrod (2004) make it clear that one specific guideline in constructing a questionnaire is a non-negotiable: “Above all, you should make sure that every question is essential for you to address the research problem” (Leedy & Ormrod, 2005, p. 192). See Table 4 for an analysis of the Gaylard (2004) questionnaire and its applicability to the current research, indicating how each part addresses a specific variable in the study.

Table 4: Analysis of the Gaylard questionnaire (Gaylard, 2004)

Variables from literature review	Sources of data	Questionnaire item(s)	Gaylard variable(s) / factor(s)
Environment	(Bedggood & Phillips, 2008), (Berris & Jackson, 2008), (Deery, 2008), (Drucker, 1999), (Elloy & Smith, 2003), (Harpaz, 2002), (Institute of Management & Administration, 2008a), (Institute of Management & Administration, 2009a), (Lanigan, 2008), (K. S. Lee, 2008), (Luftman, 2008), (Mano-Negrin, 1998), (Mawson, 2012), (Morgan, et al., 2004), (Rethinam & Ismail, 2008), (Shem, 2008), (Sumner, 2008), (Wickham & Fishwick, 2008)	2.3, 2.10, 2.28, 2.29, 2.30, 2.32, 2.39, 2.40, 2.41, 2.44, 2.45, 2.47, 2.48	**A social working environment, The job itself, and A performance-enabling environment**

Variables from literature review	Sources of data	Questionnaire item(s)	Gaylard variable(s) / factor(s)
Returns	(Chew & Chan, 2008), (Deery, 2008), (Emerald Group Publishing Limited, 2007), (Emerald Group Publishing Limited, 2008a), (Ferratt, et al., 1999), (Flood, et al., 2001), (Institute of Management & Administration, 2009c), (Institute of Management & Administration, 2009d), (Lanigan, 2008), (K. S. Lee, 2008), (Luftman, 2008), (Mano-Negrin, 1998),(Rethinam & Ismail, 2008), (Sanjay, 2006), (Shem, 2008)	2.11, 2.13, 2.14, 2.17, 2.23, 2.31, 2.32, 2.33, 2.50	**Financial reward, and recognition**
Supervision	(Corporate Leadership Council, 2004), (Corporate Leadership Council, 2008b), (Drucker, 1999), (Emerald Group Publishing Limited, 2008b), (Glen, 2009), (Hamel, 2009), (Luftman, 2008), (Mano-Negrin, 1998), (Rhodes & Stelter, 2009), (Sanjay, 2006), (Shem, 2008)	2.1, 2.8, 2.9, 2.12, 2.24, 2.35, 2.49	**Interaction with and competence of direct managers, and Fair treatment**

Variables from literature review	Sources of data	Questionnaire item(s)	Gaylard variable(s) / factor(s)
Enrichment	(Adelstein, 2008), (Cappelli, 2008), (Chew & Chan, 2008), (Defillippi & Arthur, 1994), (Ferratt, et al., 1999), (Institute of Management & Administration, 2008a), (Lamb & Sutherland, 2010), (Loogma, et al., 2004), (Mano-Negrin, 1998), (Maurer & Lippstreu, 2008), (Muja & Appelbaum, 2012), (O'Neil, 2009), (Palan & Berhad, 2007), (Rethinam & Ismail, 2008), (Sanjay, 2006), (Scholarios, et al., 2008), (Shem, 2008), (Stahl, et al., 2009), (Wickham & Fishwick, 2008)	2.2, 2.4, 2.16, 2.18, 2.21, 2.27, 2.43, 2.46	**A developmental environment**
Feedback	(Chew & Chan, 2008), (Emerald Group Publishing Limited, 2008a), (Emerald Group Publishing Limited, 2008b), (Ferratt, et al., 1999), (Lanigan, 2008), (Luftman, 2008), (Mano-Negrin, 1998), (Rhodes & Stelter, 2009), (Shem, 2008)	2.6, 2.15, 2.20, 2.22, 2.24, 2.26, 2.36, 2.37	**A performance-enabling environment**

Variables from literature review	Sources of data	Questionnaire item(s)	Gaylard variable(s) / factor(s)
Organisational career prospects	(Bohannon, 2008), (Chew & Chan, 2008), (Emerald Group Publishing Limited, 2008a), (Ferratt, et al., 1999), (Herriot, et al., 1997), (Josefek & Kauffman, 2003), (Mano-Negrin, 1998)	2.7, 2.25, 2.38, 2.42	**A developmental environment**
Stay	(Bohannon, 2008), (Chew & Chan, 2008), (Corporate Leadership Council, 2004), (Corporate Leadership Council, 2006b), (Emerald Group Publishing Limited, 2008a), (Mano-Negrin, 1998), (Rethinam & Ismail, 2008), (Wickham & Fishwick, 2008)	2.5, 2.19	**Fair treatment**
Leave	(Bohannon, 2008), (Corporate Leadership Council, 2004), (Deery, 2008), (Eldridge, 2008), (Emerald Group Publishing Limited, 2008b), (Lanigan, 2008), (Mano-Negrin, 1998), (Rethinam & Ismail, 2008), (Salanova, et al., 2012), (Sethi, et al., 2004), (Shropshire & Kadlec, 2012), (Vardaman, et al., 2008), (Wöcke & Heymann, 2012)	3.1, 3.2	**Intention to leave, and Job satisfaction**

Variables from literature review	Sources of data	Questionnaire item(s)	Gaylard variable(s) / factor(s)
External Influences	(Flood, et al., 2001), (T. W. Lee, et al., 1999),(Morgan, et al., 2004), (Niederman, et al., 2006), (Sanjay, 2006), (Scholarios, et al., 2008), (Vardaman, et al., 2008), (Wöcke & Sutherland, 2008)	4	

The core of the Gaylard (2004) questionnaire was retained in the questionnaire used in this study; however, the current study elicited additional, appropriate demographic information and excluded the country variable, as this current research was specific to South Africa.

The questionnaire in its finalised format, used to gather primary data consisted of the following sections:

- *Section 1*: This section gathered demographic data on eight demographic topics from the respondents. Each question required the respondent to select the appropriate answer from a number of different options. In two instances, if the respondent's option was not among those presented, the respondent was able to enter their own data. These two cases were where the respondent's current employer was not listed in the options supplied; and where the highest qualification obtained by the respondent was not one of those presented;
- *Section 2*: This section formed the core of the questionnaire and was identical in content to Section 2 of the Gaylard questionnaire (Gaylard, 2004, pp. 160-163). The fifty statements presented in this section related to two different questions and elicited responses to both of these for each statement. The two questions were 'How important is this variable in my decision to remain with my current company?', and 'To what degree is this variable satisfied at my current company?' The statements related to the respondents' voluntary turnover opinions and the respondents were required to assign personal attitude scores, on an 11 point numeric scale, in the range from zero, corresponding to an attitude of 'not at all', to 10, for an attitude of 'completely', when rating each statement for each of the two questions. An answer of zero (not at all) to the question of 'How important is this variable in my decision to remain with my current company?' was interpreted as the statement in question had no importance in the respondent's decision to remain with their current organisation, while an answer of 10 (completely) to the same question was interpreted as the statement being vitally important in the respondent's decision to remain

with their organisation. Similarly, an answer of zero (not at all) to the question 'To what degree is this variable satisfied at my current company?' corresponded to the specific statement not being satisfied at all at the respondent's current organisation, whereas a response of 10 (completely) to this question, indicated that the respondent found this to be completely satisfied in their current organisation;

- *Section 3*: This section required the respondent to rate their current outlook within their own personal circumstances, specifically their attitudes towards their current levels of job satisfaction, one of three options, and intention to leave their current organisation within a set period. There were three time-period options and one option corresponding to an attitude of no current intention to leave; and
- *Section 4*: This section of the questionnaire contained five open-ended questions where the respondent could draw attention to any additional variables not contained in the previous sections of the questionnaire, which may have an effect on their decision to remain with, or conversely to leave, their current organisation.

The finalised questionnaire is included as Appendix B to this research.

3.6 Procedure for data collection

Leedy and Ormrod (2005) suggest that computerising data collection in descriptive research can make your task "easier and more efficient" (2005, p. 197). They suggest one or a combination of the following strategies:

- Administer a questionnaire on a computer;
- Use the computer to monitor the quality of the data being collected; and
- Explore the possibility of using the Internet for data collection (Leedy & Ormrod, 2005, pp. 197-198).

All three of the possible strategies suggested were used to varying degrees in the data collection process during this research study.

One of the most well-known and popular online (web-based) data-gathering/survey tools was used for the gathering of the data required for this study. This survey tool allowed for the customisation of the finalised instrument from the emails sent out to request participation in the survey, through the setup of the questionnaire with validation rules on the completion of the questions, to the distribution of the survey link and the monitoring of the responses received and the follow-up of those still outstanding.

The survey instrument was circulated via a generic link in an email covering letter to the researcher's personal contacts in each of the eleven organisations, over whom the researcher has little influence other than the personal relationships with certain employees of these organisations, requesting participation. This email body is repeated in Appendix A. Using email, this message was then forwarded onto potential respondents in each of these organisations. In addition to these potential respondents, the link to the questionnaire was delivered via a personalised email to each of the IT professionals in the researcher's immediate and affiliated organisations, by using the survey tool's email invitation collector. Each of the IT professionals of the immediate and affiliated organisations received their own link to the questionnaire, which enabled automatic response tracking by the online tool itself. In order to maximise the return rate among this known, identifiable sample, follow-up emails with specific, targeted, customised content were circulated over the course of the period during which the data was gathered, to those who had not yet responded.

The link in the email was the internet address for the survey and by hyperlinking through from the email, the respondent was taken to the website survey. In the website format, the questionnaire consisted of multiple pages with each page containing an appropriate number of questions. The progress through the questionnaire was also tracked using a progress bar to keep the respondent apprised of progress. Automated validation designed into the online questionnaire enabled the following checking:

- The submission of incomplete questionnaires was prevented;
- Duplicate submissions were prevented; and

- The use of specific, pre-defined response options ensured that only valid answers were allowed.

In keeping with the laws on unsolicited communications, email opt-out options were also in place, which allowed respondents who did not wish to participate to opt out of the survey. Had there been any respondents opting out all follow-up communications to such individuals would have been suspended.

The survey tool also took care of the storage of the responses and the permanent online availability of the data. Once the survey was closed, the data was downloaded into Microsoft Excel format, which was then input into the analysis tool, IBM's SPSS, for data analysis.

3.7 Data analysis and interpretation

The data results obtained from the data collected from the sample was subjected to various forms of statistical analysis both nonparametric and parametric. While the data obtained from each of the survey questions are primarily ordinal, which precluded the use of parametric statistics, the asymptotic analogy, distribution fitting algorithmic approach suggested by Stacey (2005), fits a normal distribution to the data and produces descriptive statistics, in particular means and standard deviations, which can be used in parametric tests. Both descriptive and inferential statistics are used in the data analysis of this study. Welman, et al. (2005) put the data analysis process succinctly when they state:

> "A large data file can be reduced to useful information, which can facilitate the interpretation of data as well as the drawing of conclusions by means of descriptive and inferential statistics" (Welman, et al., 2005, p. 241).

To begin with, the sample demographics were analysed and various descriptive statistics produced for these nominal and ordinal variables. These groupings of data were presented in the form of graphical distributions. The demographic categories analysed were the following:

- Current employer;
- Race;
- Gender;
- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained;
- Current level of expertise;
- Job satisfaction level;
- Intention to leave.

The graphical distributions of the demographic data were used to produce a profile of the sample respondents, prior to any research propositions being addressed.

The data collected via the numerical scales in Section 2 of the questionnaire were subjected to the asymptotic analogy, distribution fitting algorithmic approach, as described by Stacey (2005), in order to use parametric techniques for the analysis of this data. The distribution that was fit for the data was the normal distribution. This method of analysis was appropriate because there were multiple survey items and the response scale was verbal, ordinal. This approach is advantageous because (Stacey, 2005):

- The assumption of normality is automatically fulfilled by the normal distribution fitting algorithm;
- Although the target sample is large, the response may be low, and in such a case, this method is appropriate; and
- Discretisation error is eliminated as the response data is not assumed to be interval scaled, and is analysed in its original format.

Once this approach had been completed, parametric statistical techniques were able to be applied. This methodology therefore enabled the use of the means and standard deviations to rank the variables for both questions posed in Section 2 of the survey. This approach was used in the analysis of three of the five research

propositions (namely propositions one, two and five), where means were required to address the propositions and to perform further parametric analysis.

The data analysis performed for each of the five research propositions follows:

3.7.1 *Analysis of Research Proposition 1*

This research proposition states that the most important retention themes that influence an IT professional's decision to remain with an organisation are:

- Work/home balance;
- Well-developed interdependence with other colleagues;
- Clear and open communication channels with direct management;
- Performance-related financial reward; and
- A performance-enabling environment.

The numerical data from Section 2 for the question 'how important is this variable in my decision to remain with my current company?' was subjected to Stacey's (2005) distribution-fitting algorithmic approach in Microsoft Excel which resulted in item means and standard deviations for each of the fifty statements to which this question was applied. The Chi^2 statistic was also calculated as it is suggested (Stacey, 2005) that this statistic is the most appropriate for optimising the parameters for the model. Stacey (2005) states the following regarding the fit of the model to the data: "if the value of Chi^2 is not significant, then the model (distributions and thresholds) can be deemed to adequately fit the survey data" (Stacey, 2005, p. 7).

These item means were then used to rank the statements in order of importance. The top 10 statements based on these rankings were deemed the most important variables affecting turnover intentions of IT professionals.

If any of the statements could be logically grouped into common themes, this was done according to the researcher's own wording, and was not influenced by the wording in the Gaylard (2004) study, even where the themes were deemed similar.

In addition, for each statement pertaining to the question, 'how important is this variable in my decision to remain with my current company?', a Chi^2 t-test was performed on each statement (with degrees of freedom being sample size less two, performing a 2-tailed test) resulting in p-values which indicated the difference from the overall mean of the statement. This enabled the interpretation of all of the values that were significantly different from the mean (using a significance level of 5 per cent) per statement, and thus were indications of whether the statement in question was significantly important or significantly unimportant in the decision to remain with the current company. The significantly important statements were then highlighted.

Due to the fact that this was a comparison study to the research performed by Gaylard (2004), and that the original study used a correspondence analysis rescaling method on the data prior to determining the descriptive statistics such as means and standard deviations, the original data was reanalysed using the distribution-fitting algorithmic approach (Stacey, 2005). This was done in order to generate the required statement means to allow for accurate, appropriate comparisons. These were then ranked, grouped, and comparisons were drawn between the two sets of results.

3.7.2 *Analysis of Research Proposition 2*

This research proposition states that the traditional retention variables such as those listed will have little influence on an IT professional's decision to remain with an organisation:

- Job security;
- Loyalty;
- Share options;
- Pension/provident scheme; and
- Health care benefits.

Again, the numerical data from Section 2 for the question, 'how important is this variable in my decision to remain with my current company?' was subjected to

Stacey's distribution-fitting algorithmic approach (2005) in Microsoft Excel which resulted in item means and standard deviations for each of the fifty statements to which this question was applied. The Chi^2 statistic was also calculated as it is suggested (Stacey, 2005) that this statistic is the most appropriate for optimising the parameters for the model. Stacey (2005) states the following regarding the fit of the model to the data:

> "… if the value of Chi^2 is not significant, then the model (distributions and thresholds) can be deemed to adequately fit the survey data" (Stacey, 2005, p. 7).

These item means were then used to rank the statements in order of importance. The bottom 10 statements based on these rankings were deemed the least important variables affecting turnover intentions of IT professionals.

If any of the statements could be logically grouped into common themes, this was done according to the researcher's own wording, and was not influenced by the wording in the Gaylard (2004) study, even where the themes were deemed similar.

In addition, for each statement pertaining to the question, 'how important is this variable in my decision to remain with my current company?', a Chi^2 t-test was performed on each statement (with degrees of freedom being sample size less 2, performing a 2-tailed test) resulting in p-values which indicated the difference from the overall mean of the statement. This enabled the interpretation of all of the values that were significantly different from the mean (using a significance level of 5 per cent) per statement, and thus were indications of whether the statement in question was significantly important or significantly unimportant in the decision to remain with the current company. The significantly unimportant statements were then highlighted.

Due to the fact that this was a comparison study to the research performed by Gaylard (2004), and that the original study used a correspondence analysis rescaling method on the data prior to determining the descriptive statistics such as means and standard deviations, the original data was reanalysed using the

distribution-fitting algorithmic approach (Stacey, 2005). This was done in order to generate the required statement means to allow for accurate, appropriate comparisons. These were then ranked, grouped, and comparisons were drawn between the two sets of results.

3.7.3 *Analysis of Research Proposition 3*

This research proposition states that the variables that have the most influence on IT professionals' decisions to remain with an organisation may be meaningfully grouped by factor analysis into the following six factors:

- *Factor 1*: Equity and enablement for high performance;
- *Factor 2*: Liberated and empowered culture;
- *Factor 3*: Effective and interactive communication channel;
- *Factor 4*: Environment rich in personal growth opportunities;
- *Factor 5*: Standard employment contract benefits; and
- *Factor 6*: Social interaction.

In order to determine the underlying factors of the variables (statements made in the questionnaire) that affect the turnover intentions of IT professionals, an exploratory factor analysis (EFA) was performed on the data, which related to the respondents' decisions to remain with their current company. Conway and Huffcutt (Conway & Huffcutt, 2003) suggest that there are three important decisions when performing an exploratory factor analysis. The first is the selection of the factor extraction model. In this research principal factor analysis (PFA), principal axis factoring method is used over the more popular principal components analysis (PCA), as PFA tends to include more factors than PCA (Buja & Eyuboglu, 1992). The second important decision in factor analysis is determining the number of factors making up the required factor solution. Traditionally (Conway & Huffcutt, 2003; Hayton, Allen, & Scarpello, 2004), exploratory factor analysis considered the following combination of requirements in determining this number:

- Eigenvalues greater than one;

- Point where the Scree plot changes significantly; and
- The most logical interpretation of the factor solution – which is a subjective measure.

The prior requirements were analysed for the data set of statements relating to the question, 'How important is this variable in my decision to remain with my current company?' using SPSS. The SPSS output for the variance are explained and the Scree plots are given in Appendix E. The number of factors indicated by the requirement of eigenvalues greater than one was 10 factors (see Table 65 in Appendix E). The Scree plot was not conclusive instead indicating possibilities of four, five or six factors (see Figure 25 in Appendix E).

Given the previous divergence in possibilities, it was decided to run a parallel analysis on the data to determine the number of factors. Hayton et al. (2004, p. 198) suggest the following four steps in conducting a parallel analysis:

- *Step 1*: Generate random data;
- *Step 2*: Extract eigenvalues from the random data correlation matrix;
- *Step 3*: Average the eigenvalues from the random data; and
- *Step 4*: Compare real data with parallel random data.

The preceding steps were taken to arrive at the parallel analysis graph presented in Appendix F, Figure 26. From this graphical representation, it can be seen that three eigenvalues lie completely above the line indicating the eigenvalues from the random data. The use of parallel analysis, therefore, indicated the retention of three factors for this research proposition. The factor analysis was run again in SPSS using a limit of three factors (see Appendix G, Table 66 for the Principal axis factoring – total variance explained for the 3-factor solution).

The third important decision to be made in exploratory factor analysis relates to rotation. Included in the former three factor dimension reduction process, a rotated factor analysis was performed using SPSS and varimax orthogonal rotation, to highlight the variables (statements) that load heavily (greater than 0.4) into each of the factors. By interpreting the meaning of each of these groupings, using the

variables as well as insights gained through the literature review process, the factors were named appropriately and descriptively and this was done according to the researcher's own wording, and was not influenced by the wording in the Gaylard (2004) study, even where the factors were deemed similar.

Following the identification of the factors, each of the factors' perceived relative importance was determined by using the factor loadings of each statement as the strength with which that statement was associated with the factor in question and then calculating the average of the weighted means. The non-refined weighted sum method (DiStefano, Zhu, & Mindrila, 2009) was used as a basis for this calculation, thereby taking into account the strength of each item identified as loading heavily into the factor. In this study, as in the Gaylard study (2004), each statement mean was weighted by the statement loading. These weighted means were then averaged in order to calculate the weighted average of the statement means for each factor as a whole. Each weighted average was then interpreted as the relative importance of each factor in the decision of the IT professional to remain with their current organisation.

In order to assess the reliability of the factors, Cronbach's coefficient alpha was calculated for each factor. Alpha values of between 0.7 and 0.8 are satisfactory when comparing groups (Bland & Altman, 1997), but a minimum value for alpha of 0.8 should be the goal for excellent internal consistency and reliability (Gifford & Cummings, 1999; Gliem & Gliem, 2003).

Due to the fact that this was a comparison study, and that the original research found six factors underlying the gathered data (Gaylard, 2004), the data for this study was additionally subjected to a six-factor factor analysis. The Gaylard (2004) data was also reanalysed in order to use the raw data and not the rescaled data, as had been the case in the original study. As with the three-factor factor analysis, principal axis factoring was used together with the pre-decided six factors and a varimax rotation for both the reanalysed Gaylard (2004) data, as well as the data from this research. Cronbach's alpha was calculated for each of the six factors in both cases and the internal consistency was interpreted

accordingly. The intuitive meaning of each grouping was also inferred for each set of six factors and each factor was then aptly named.

3.7.4 *Analysis of Research Proposition 4*

This research proposition states that there is a moderately strong inverse relationship between IT professionals' level of job satisfaction and their intention to leave an organisation. In addition, there is no relationship between an IT professional's intention to leave an organisation and each of the following demographic categories:

- Current employer;
- Race;
- Gender;
- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained; and
- Current level of expertise.

The demographic categories analysed in order to address this research proposition were the following:

- Current employer (nominal level data) – the various organisations targeted in this research were listed as response options;

- Race (nominal level data), with possible response options:

    1. Black,
    2. White,
    3. Asian, or
    4. Coloured;

- Gender (nominal level data), with possible response options:

1. Male, or
2. Female;

- Age (ordinal level data), with possible response options:

  1. 18 to 30,
  2. 31 to 40,
  3. 41 to 50, or
  4. More than 50;

- Number of employees in current organisation (ordinal level data), with possible response options:

  1. 1 to 100,
  2. 101 to 500,
  3. 501 to1000, or
  4. More than 1000;

- Years of service with current organisation (ordinal level data), with possible response options:

  1. Less than 1 year,
  2. 1 to 5 years,
  3. 5 to 10 years, or
  4. More than 10 years;

- Highest university or equivalent qualification obtained (ordinal level data), with response options:

  1. Bachelors/Diploma,
  2. Honours,
  3. Masters,
  4. PhD, or
  5. Other;

- Current level of expertise (ordinal level data), with possible response options:

    1. Entry level,
    2. Seasoned, or
    3. Expert;

- Job satisfaction level (ordinal level data), with possible response options:

    1. Low,
    2. Medium, or
    3. High.

For each of the nominal level variables aforementioned, namely current employer, race and gender, the extent of the relationship/independence in each case to the variable 'intention to leave', an ordinal level variable, was established as well as identifying whether the relationship was significant or not. This was accomplished using cross-tabulations in SPSS and interpreting the output, specifically the Chi^2 test statistic and p-value.

> "The chi-square test for independence is based on the counts in a contingency (or cross-tabs) table. It tests whether the counts for the row categories are probabilistically independent of the counts for the column categories" (Albright, Winston, & Zappe, 2006, p. 532).

The cross-tabulation and Chi^2 statistic SPSS outputs for each of the analyses are presented in Appendix M. The response options for 'Intention to leave' were 'within the next 1 year', 'within the next 1-2 years', 'within the next 2-3 years' or 'not in the foreseeable future'.

The hypotheses tested in each case were as follows:

- Null hypothesis (H_0): There is no relationship between the variable and an IT professional's turnover intent; and

- Alternative hypothesis (H_1): There is a relationship between the variable and an IT professional's turnover intent.

  > "A *p*-value summarises the evidence in support of an alternative hypothesis, which is usually the hypothesis an analyst is trying to prove. Small *p*-values provide support for the alternative hypothesis, whereas large *p*-values provide little or no support for it" (Albright, et al., 2006, pp. 544-545).

Using a level of significance of 0.05, and the Chi^2 test statistic (specifically the p-values), the null hypothesis (H_0) was tested and either rejected or not.

For each of these ordinal level variables, the same hypotheses (at a level of significance of 0.05) were used to test and determine the extent of the relationship of each variable to the variable 'intention to leave', however the text values of the variables were recoded to numeric values, after which Spearman's rank order correlation coefficient was calculated using SPSS. Spearman's rank correlation coefficient measures "the extent of association between two variables each measured on an ordinal scale" (Hanke & Reitsch, 1994, p. 902). The recoding tables and Spearman's rank order correlation SPSS outputs for each of the analyses are presented in Appendix N. In each case, the Spearman's rank order correlation value indicated whether there was a correlation between the demographic variable in question and the intention to leave or not as well as the strength of this correlation. See Table 5 for the verbal anchoring of the strength of the Spearman's rank order correlation coefficient. The p-value indicated whether the correlation was statistically significant or not, based on the specified significance level.

Table 5: Verbal anchoring of the strength of the Spearman's rank correlation coefficient

Correlation coefficient value	Strength of the correlation
-1.0 to -0.08	Very strong negative
-0.79 to -0.60	Strong negative
-0.59 to -0.40	Moderate negative
-0.39 to -0.20	Weak negative
-0.19 to 0.00	Very weak negative
0.00 to 0.19	Very weak positive
0.20 to 0.39	Weak positive
0.40 to 0.59	Moderate positive
0.60 to 0.79	Strong positive
0.80 to 1.0	Very strong positive

As was the case with the previous questions, this question also formed part of the comparison study and needed to be compared to the results obtained by Gaylard (2004). Due to the differences in the demographic questions presented in the two questionnaires, only the level of job satisfaction was immediately comparable to this study. In order to compare the results of both studies in terms of the relationship between IT professionals' intention to leave and their age, the current study's age variable was recoded from ordinal to nominal as follows (Table 6):

Table 6: Recoding of age variable from ordinal to nominal

Original age variable	Recoded age variable
18 to 30	Under 30 years of age
31 to 40	30 or more years of age
41 to 50	30 or more years of age
more than 50	30 or more years of age

This recoding resulted in the addition of another nominal variable, 'age recoded', which was also subjected to cross-tabulation in SPSS and interpretation of the Chi^2 statistic in order to enable a valid comparison.

3.7.5 *Analysis of Research Proposition 5*

This research proposition states that the sample of IT professionals found the biggest 'gaps' in the provision of retention variables to fall into the following five themes:

- Performance-related financial reward;
- Job security;
- Training and opportunities for personal growth;
- Tools to enable high performance; and
- Clear communication between management and employees.

This question was answered using the data collections for both questions from Section 2 of the questionnaire: 'how important is this variable in my decision to remain with my current company?' and 'to what degree is this variable satisfied at my current company?' Both sets of data were subjected to Stacey's distribution-fitting algorithmic approach (2005) in Microsoft Excel, which resulted in item means and standard deviations for each of the fifty statements for each question. See Appendix O, Table 114 for the ranked variables according to mean for the second set of statements and Appendix P (Table 116) for the comparison of statement means and rankings between the current research and the reanalysed Gaylard (2004) results for the second set of statements. The Chi^2 statistic was also calculated as it is suggested (Stacey, 2005) that this statistic is the most appropriate for optimising the parameters for the model. Stacey states the following regarding the fit of the model to the data:

> "… if the value of Chi^2 is not significant, then the model (distributions and thresholds) can be deemed to adequately fit the survey data" (Stacey, 2005, p. 7).

The item means in each case were labelled:

- ‘How important is this variable in my decision to remain with my current company?’ – labelled [A];
- ‘To what degree is this variable satisfied at my current company?’ – labelled [B]; and
- [A] and [B] denoted the two datasets, which were used in determining the largest and smallest differences between what IT professionals find to be important in their personal organisational commitment, and the retention practices that their current employer employs.

Using the means of each of the two questions as coordinates ([A], [B]), each statement was plotted graphically, with the x-axis representing the importance of the statement in the IT professional’s turnover intent [A], and the y-axis representing the degree to which the statement is satisfied in the IT professional’s current organisation [B]. This graphical representation gave an indication of four potential categories of differences in attitudes towards the two questions.

The four categories were identified as follows:

- High importance, highly satisfied;
- High importance, low satisfaction;
- Low importance, low satisfaction; and
- Low importance, highly satisfied.

These categories and brief descriptions are diagrammed in Figure 10, and represent the method used for interpreting the differences or gaps identified between the attitudes to the two questions for each statement. The ideal outcome for any organisation would be that the statements are perfectly satisfied in accordance with their importance to the IT professionals working in that organisation. This would be represented by all of the statements lying along the diagonal green line in Figure 10.

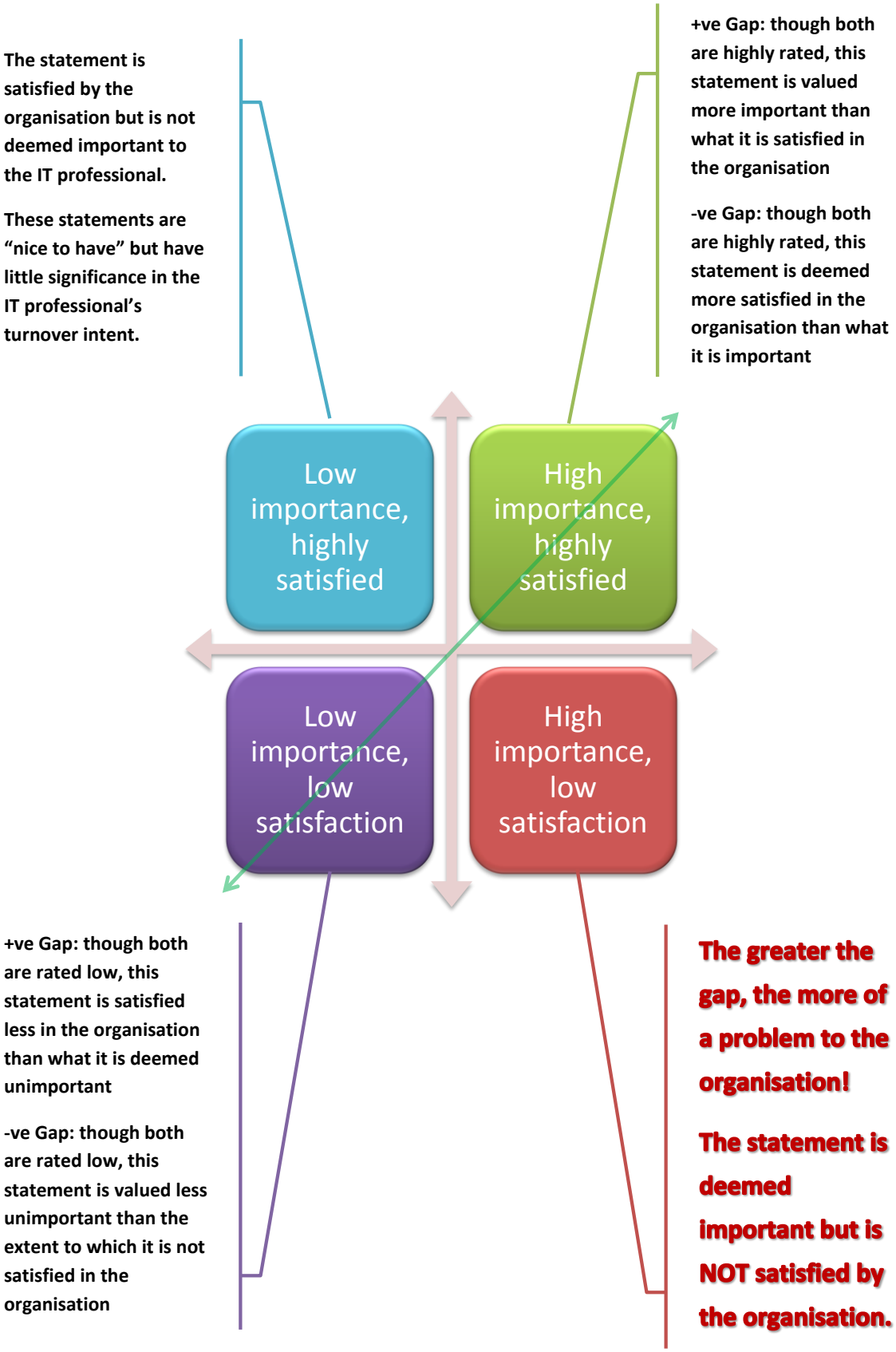


Figure 10: Method for interpretation of the differences

In order to determine the biggest and smallest ‘gaps’ in the respondent’s attitudes towards each of the two questions for each of the fifty statements, the means were subtracted for each statement using the following formula:

Gap = [A] – [B]

The statements that were plotted in each quadrant/category were interpreted differently, based on the meaning inherent in each quadrant. In each case, positive ‘gaps’ indicated a higher value for the ‘importance’ question, and negative ‘gaps’ indicated a higher value for the ‘satisfied’ question. The biggest and smallest ‘gaps’ were therefore also identified per category, by ranking the list of statements in the category based on the ‘gap’. The ranked list of statements for the difference in means (per category), between the importance of each variable in the respondents remaining with the current organisation and whether this variable was currently satisfied in their organisation, is included in Appendix Q. Each category is tabled separately:

- High importance, highly satisfied - Table 117;
- High importance, low satisfaction - Table 118;
- Low importance, low satisfaction - Table 119; and
- Low importance, highly satisfied - Table 120.

This was a comparison study to the research performed by Gaylard (2004), and that the original study used a correspondence analysis rescaling method on the data prior to determining the descriptive statistics such as means and standard deviations. The original data was reanalysed using the distribution-fitting algorithmic approach (Stacey, 2005) in order to generate the required statement means to allow for accurate, appropriate comparisons. See Appendix O, Table 115 for the ranked variables according to mean for the second set of statements and Appendix P (Table 116) for the comparison of statement means and rankings between the current research and the reanalysed Gaylard (2004) results for the second set of statements. The same formula to determine the ‘gap’ in each case was then applied and these were then ranked using the same technique as previously used, and comparisons were drawn between the two sets of results.

The ranked list of statements for the difference in means (per category) in terms of the reanalysed Gaylard (2004) data is presented in Appendix Q.

3.8 Limitations of the study

The following limitations have been identified in this study:

- It was difficult to obtain responses from IT professionals in organisations other than the researcher's own organisation. This research was dependent on the cooperation and understanding of the respondents, as well as the cooperation of the management and personal contacts tasked with disseminating the questionnaires. Care was taken to minimise entrance bias into the study, but due to the reliance on external parties (such as the people requested to participate in the study, and the contacts approached at the various organisations), this could not be guaranteed;
- Random sampling was not employed to select the respondents for this study. In the case of the researcher's organisation, the entire population was selected. The study entailed a sample of convenience;
- One may not generalise from the findings of this study as no random sampling took place. The ability to generalise the research may be compromised due to the use of a convenience sample, which in turn implies a degree of lost external validity;
- There may be misunderstanding or misinterpretation of the questions posed. A pre-validated questionnaire was used in order to attempt to prevent any confusion; and
- The respondents are limited geographically to the Gauteng province only, and no respondents were sought from the rest of South Africa.

3.9 Validity and reliability

This section considers the validity, namely the accuracy, meaningfulness and credibility, and the reliability of this research study as a whole. "Both validity and reliability reflect the degree to which we may have error in our measurements"

(Leedy & Ormrod, 2005, p. 29), and this section attempts to define these possible errors theoretically, present the known instances of these errors in this study and discuss the actions taken to firstly prevent these errors, and secondly, where prevention was not possible, to minimise their effect.

The issues of external and internal validity respectively are addressed in answering the following two questions (Leedy & Ormrod, 2005, p. 97):

1. Can we use what we have observed in the research situation to make generalisations about the world beyond that specific situation?

2. Does the study have sufficient controls to ensure that the conclusions we draw are truly warranted by the data?

These questions are addressed in the sections that follow.

3.9.1 *External validity*

Leedy and Ormrod (2005, p. 99) define the external validity, also called 'population validity' by some methodologists (Welman, et al., 2005, p. 125), of a research study as:

> "… the extent to which its results apply to situations beyond the study itself – in other words, the extent to which the conclusions drawn can be generalised to other contexts" (Leedy & Ormrod, 2005, p. 99).

Welman et al. (2005, p. 127) highlight the extreme importance of external/population validity in non-experimental research', and specifically in 'attitude surveys'. Good external validity of this study is therefore critical and would be an indication of how relevant it is beyond the context of this particular research, and to what extent the findings made in this study, may be applicable to other scenarios, such as different persons, settings and times.

Leedy and Ormrod suggest three commonly used strategies to enhance external validity (Leedy & Ormrod, 2005, p. 99):

- A real-life setting;
- A representative sample;
- Replication in a different context.

The external validity of this research was enhanced by the fact that the study was not conducted in a laboratory setting, but was set in a real-life environment, that of the IT professional. While the control element, present in experiments, was not enforceable in this situation, the mere fact that this research was conducted in the outside world yielded results that were more applicable *in* the world. This research may therefore be more valid than any similar research conducted in a laboratory.

However, the ability to generalise completely the findings of a study among human beings is unlikely due to the vast diversity evident in people. It is therefore ideal in any research that the sample is as representative a sample of the population being studied as possible, which is not the case in this research. While the majority of the data was gathered from all of the organisations within one specific holding company, and each of the members of this micro-population were given the opportunity to participate in this research, this meant that there was a strong possibility that the results would be indicative of this micro-population only, and not necessarily of the entire originally-defined population. A nonprobability sampling method, namely convenience sampling, was chosen in an attempt to get additional respondents (in addition to those from the holding company) from the originally defined population. The combination of these specific sampling methods meant that the respondents came from the Gauteng province only.

Owing to the fact that the questionnaire stands on its own, previously validated and without the need for explanation, this ensured that each respondent received the questionnaire and ultimately the study, in the same way. No external influences would change this, irrespective of whether different researchers were to conduct similar studies on different days in different contexts. In addition, in order to minimise any time intervals affecting the responses, and in order to ensure that all respondents answer within a specific time context, a short time frame of two weeks was allowed for the response to this survey. This ensured that all

respondents answered the survey within a specific time context, with limited chance of this context being experienced differently throughout the sample.

Therefore, the question posed by Leedy and Ormrod (2005, p. 97), namely ‘can we use what we have observed in the research situation to make generalisations about the world beyond that specific situation?’ in addressing the issues of external validity can be answered particularly in the context of this study, by the following summary:

This particular research shows adequate external validity because the research was undertaken in a real-world setting as well as the fact that it is replicable in a different context. There is a concern around the representativeness of the sample; however, this is at the very least representative of the micro-population. This study is therefore relevant beyond the context of this particular research, specifically into populations of which IT professionals are a subset, such as the population of knowledge workers, and similar subsets of knowledge workers, such as engineers. While it cannot be conclusively generalised, the study’s findings are applicable to other specific contexts involving different people of similar educational background and technical skill set, different settings such as different countries and different times.

3.9.2 *Internal validity*

According to Leedy and Ormrod (2005, p. 97), the:

> “… internal validity of a research study is the extent to which its design and the data it yields allow the researcher to draw accurate conclusions about cause-and effect and other relationships within the data” (p. 97).

Good internal validity observed in this research would therefore mean the design of the study and the data gathered as a result of the study, enable accurate conclusions to be drawn about the relationships within the gathered data.

Leedy and Ormrod (2005) suggest that in order to ensure the internal validity of a research study precautions need to be taken to "eliminate other possible explanations for the results we observe" (Leedy & Ormrod, 2005, p. 98). There are several strategies that they suggest be used in research in order to ensure that the explanations given are the only possible ones for the results observed – there are no other possibilities. These strategies include:

- *"A controlled laboratory study"*: conducted in a laboratory to regulate environmental conditions (Leedy & Ormrod, 2005, p. 98);
- *"A double-blind experiment"*: used when comparing methods and using two groups of participants. Neither group knows the hypothesis or whether they are in the group hypothesised to be more or less effective. Both groups (as well as the facilitators) are 'blind' (Leedy & Ormrod, 2005, pp. 98-99);
- *"Unobtrusive measures"*: the participants are observed in an unobtrusive manner – they do not know that they are being observed (Leedy & Ormrod, 2005, p. 99); and
- *"Triangulation"*: the use of multiple measures to measure the same construct in order to determine whether they converge towards a specific theory (Leedy & Ormrod, 2005, p. 99; Welman, et al., 2005, p. 143).

As documented in the previous section, this research was conducted in the real world, which increased the external validity, but this was at the expense of internal validity, where controlled laboratory studies, conducted in controlled environments, tend to increase internal validity. The double-blind strategy could not be used, as this research study did not compare two methods with each other. While no unobtrusive measures were used directly in this research, a similar resultant strategy was employed. Presupposing that the reason for not wanting people to know they are being observed is due to the potential for participants changing their behaviour when they know they are being observed. A method that can be employed to discourage this behaviour in questionnaire surveys, such as this one, is to provide an environment where the participant does not feel the need to answer in any other way than is totally truthful. This research accomplished this by providing a secure, private, online method of data collection, and thereby

increased the level of internal validity. Triangulation is more commonly used in qualitative research (Leedy & Ormrod, 2005) and therefore was not considered as an option in this quantitative study.

The validity of the research instrument forms a large component of the internal validity of a study. The "validity of a measurement instrument is the extent to which the instrument measures what it is actually intended to measure" (Leedy & Ormrod, 2005, p. 92). The core of the research instrument used in this study was the same instrument as devised by Gaylard (2004), which had already been tested in the determining of the factors influencing the retention of IT professionals. The different forms of instrument validity (Leedy & Ormrod, 2005, p. 92), the applicability of these to different situations, and how each of these forms of validity was addressed in this research, follow:

1. *Face validity*: "the extent to which, on the surface, an instrument *looks like* it's measuring a particular characteristic" (Leedy & Ormrod, 2005, p. 92). This is a rather subjective measure, as it relies on the attitudes and feelings of the respondents towards the instrument presented to them. The respondents need to feel that they believe that the description of the research and the questions asked in the questionnaire are aligned and that each question is valid in the information it is eliciting, and that this information is related to the topic of the research. For face validity to be present, the respondents need to feel comfortable in answering the questionnaire. Based on the purely subjective feedback received from the respondents and the fact that there was no negative feedback in terms of the questionnaire, it is apparent that the face validity of this research instrument was adequate.

2. *Content validity*: "the extent to which a measurement instrument is a representative sample of the content area (domain) being measured" (Leedy & Ormrod, 2005, p. 92). The literature review presents the numerous options available for investigation, based on the current and historical theory and studies around the topic and the research instrument contains numerous questions/statements in order to measure the

characteristics accurately. The two sets of information map directly to each other, which is illustrated in Table 4, hereby ensuring content validity.

3. *Criterion validity*: “the extent to which the results of an assessment instrument correlate with another, presumably related, measure” (Leedy & Ormrod, 2005, p. 92), or alternatively:

> “… the degree to which diagnostic and selection measurement/tests correctly predict the relevant criterion (the variable that is to be diagnosed or on which success is to be predicted respectively)” (Welman, et al., 2005, p. 144).

No criterion were measured at the time of executing this research, therefore there are no indicators of concurrent criterion validity. One criterion, which would be available to measure now, a year after the data has been gathered is whether those participants who indicated an intention to leave their organisation (turnover intent) have in fact now left, a year later – this would constitute high predictive criterion validity. Criterion validity is difficult to determine and:

> “… a typical problem in criterion-related validation is trying to locate a measure of the criterion that has a sufficient reliability and construct validity” (Welman, et al., 2005, p. 144).

As such, there is no criterion validity shown for this research.

4. *Construct validity*:

> “the extent to which an instrument measures a characteristic that cannot be observed but must instead be inferred from patterns in people’s behaviour” (Leedy & Ormrod, 2005, p. 92),

Alternatively, stated differently:

> "… the degree to which [the measurement instrument] measures the intended construct rather than irrelevant constructs or measurement error" (Welman, et al., 2005, p. 142).

The constructs and variables related to voluntary turnover intent are not directly observable, and hence the need to use a survey of IT professionals to determine these intentions. "An important threat to the construct validity of questionnaire measurements lies in response reactivity" (Welman, et al., 2005, p. 143). Reactivity, also called the Hawthorn effect, occurs when "participants in a research study change their behaviour simply because they know they are in a research study" (Leedy & Ormrod, 2005, p. 98). This change in behaviour may take different forms, such as "faking it, socially desirable responses or acquiescence" (Welman, et al., 2005, p. 143). As with the strategy to unobtrusively measure participants, this form of internal validity, construct validity, also requires consistent behaviour from participants irrespective of whether they know they are in a research study or not. Their answers need to be consistent and truthful. A strategy to minimise reactivity and the Hawthorn effect is the same one described prior for 'unobtrusive measures' and involves the provision of a secure, private, online method of data collection, which encourages and allows the respondent to answer in a totally honest manner. This strategy has increased the level of construct validity in this research, as the honesty of participants is the only guarantee the study has of consistent participant behaviour, which is required for any inferences to be accurate. The most important underlying construct in this research is that of turnover intent, which is not directly measureable, and by asking the specific questions that have been asked using this previously validated instrument of Gaylard (2004), there is evidence that the turnover intent of IT professionals is being measured by this instrument. This study revealed similar results to those presented by Gaylard (2004), which further adds to the construct validity of the instrument in question.

Therefore, the question posed by Leedy and Ormrod (2005, p. 97), namely “does the study have sufficient controls to ensure that the conclusions we draw are truly warranted by the data?”, in addressing the issues of external validity, can be answered particularly in the context of this study by the following summary:

This particular research shows good internal validity particularly in terms of the strategy of a variation on unobtrusive measures, as well as the instrument validity specifically face, content and construct validity. Adequate measures were not built into this study in order to ensure criterion validity. This study, displaying good internal validity, therefore enables accurate conclusions to be drawn about the relationships within the gathered data.

A final thought on validity in general:

Addressing validity, both internal and external, will result in more valid and meaningful conclusions than if they are not considered.

> “The conclusions are only valid and meaningful to the extent that they are warranted based on the data collected *and* have applicability beyond the specific research situation itself” (Leedy & Ormrod, 2005, p. 100).

This is valid to a large degree for this research.

3.9.3 *Reliability*

> In general, according to Leedy and Ormrod (2005, p. 29)“… reliability is the consistency with which a measuring instrument yields a certain result when the entity being measured hasn’t changed” (p. 29).

The “idea of replicability and repeatability of results or observations” (Golafshani, 2003, p. 598) is fundamental to reliability.

The following are various forms of instrument reliability that are of interest in research studies (Leedy & Ormrod, 2005, p. 93; Welman, et al., 2005, pp. 146-148):

- *Interrater reliability*: the extent to which multiple people scoring the same measurement arrive at the same conclusions or judgements. The level of inconsistency among the 'raters' should be minimised;
- *Internal consistency reliability*: this form of reliability can be measured by calculating Cronbach's coefficient alpha, which is an index that shows "the degree to which all the items in a measurement/test [/instrument] measure the same attribute" (Welman, et al., 2005, p. 147);
- *Equivalent forms/parallel forms reliability*: the extent to which interchangeable versions of the same instrument yield similar results. Each version should measure "the same construct equally well but by means of different content" (Welman, et al., 2005, p. 146). This specific reliability of the measurement in question may be estimated using the reliability coefficient obtained in the internal consistency reliability calculation – Cronbach's alpha (Welman, et al., 2005); and
- *Test-retest reliability*: "the extent to which the same instrument yields the same result on two different occasions" (Leedy & Ormrod, 2005, p. 93). The two sets of scores are then correlated to obtain the correlation coefficient, which is an index of test-retest reliability.

In this study, several of these forms of reliability were evident. Interrater reliability was of no consequence in this research, because there were no people scoring the measurements. In this study, the 'rater' nevertheless aligned essentially with the online data gathering tool, which demonstrated reliability in the way in which all respondents were scored identically. Internal consistency reliability was high in this study, as denoted by the high values of the reliability coefficient – Cronbach's coefficient alpha. This value for the overall instrument was calculated to be 0.96, which is very high and indicates an excellent level of internal consistency reliability. As this index is also an estimate of equivalent/parallel forms reliability, this value can also be an indication of very high equivalent forms reliability.

The following three strategies for enhancing the reliability of measurement instruments are made by Leedy and Ormrod (2005, p. 93):

- Administer the instrument in a consistent fashion (standardisation);
- Where subjective decisions may be required by the researcher, these judgements should be made in accordance with pre-defined, specific criteria;
- Research assistants, where present, should be well trained.

Standardisation is consequently one of the most important pre-requisites for reliability – the use of the instrument should be standardised "from one situation or person to the next" (Leedy & Ormrod, 2005, p. 93). This was the most important pre-requisite for the reliability of this study and accordingly was also the most important strategy to be followed in conducting this research in order to deliver a reliable study. The administering of this instrument was completed in a very consistent fashion using the online data-gathering tool to provide all of the respondents with a standardised instrument, environment and experience. There were no research assistants involved who required training, as the instrument was standardised in the data-gathering model, and used an automated online tool that required no human intervention from an administration point of view. The instrument had built-in validations to ensure that all the items were completed in accordance with valid responses, and this eliminated the need for coding of variables from human paper-and-pencil questionnaires. No subjective decisions were required in this respect from the researcher, and neither from any assistants as there were no assistants involved in the study.

The following summary on the reliability of this study is presented:

While "reliability is a necessary, but insufficient condition for validity" (Leedy & Ormrod, 2005, p. 29), "in order to have validity, we must also have reliability" (Leedy & Ormrod, 2005, p. 93). Reliability is therefore a first step towards validity and consequently it is very important that this is present in any research, and the previous section shows that this research demonstrated a high level of reliability,

specifically in yielding consistent results without any change to the underlying characteristic.

It should also be noted that methodological reliability and validity of this study was enhanced through the use of Stacey's (2005) distribution-fitting algorithmic approach. In his paper on this subject (Stacey, 2005), "the reliability and validity of the item means and standard deviations of ordinal level response data", the inherent, innate reliability and validity of this approach above the likes of the correspondence analysis rescaling approach (Bendixen & Sandler, 1995), is demonstrated.

CHAPTER 4: PRESENTATION OF RESULTS

4.1 Introduction

The previous chapter, research methodology, detailed how the research was conducted. This chapter concerns what was found in terms of the results. This chapter contains a summary of the statistical analyses performed in order to address the research propositions posed in this research. The chapter commences with a summary of the demographic profile of the respondents including the survey response rate and graphical representations of each of the 10 demographic categories contained in the survey. The statistical techniques employed and the results relating to each of the five research propositions are also presented, together with comparisons to the Gaylard (2004) original study and the reanalysis of the Gaylard (2004) data where necessary to enable valid comparisons to be drawn. The interpretation of the results is presented in the following chapter.

4.2 Demographic profile of respondents

While 453 questionnaires were distributed, the expected number of returns was 275, which indicated an expected response rate of 61 per cent. The number of usable responses received totalled 259, an actual response rate of 57 per cent, which was adequate for the research and well within the range of the expected rate (see Table **7** for the summarised results).

Table 7: Summary response rate

	Number sampled	Expected returns	Actual returns
Rate		61%	57%
Total	**453**	**275**	**259**

The fact that all responses completed were completed such that they were included in the analysis indicated a 100 per cent usability rate. This perfect usability rate may seem extreme however, due to the technological advances in data-gathering tools in recent years it was not unexpected.

In order to get a complete profile of the sample respondents, data from 10 demographic categories was collected.

The demographic categories presented to the respondents were the following:

- *Current employer*: respondents from 12 financial services organisations contributed to the research by replying to the survey;
- *Race*: respondents were asked to classify themselves according to four race categories;
- *Gender*: the sex of each respondent was requested;
- *Age*: this category required the respondents to place themselves into one of four different age bands;
- *Number of employees in current organisation*: this demographic question related to the total number of people that were employed at their current organisation, and consisted of four different categories;
- *Years of service with current organisation*: each respondent was asked to state their current tenure category with their current organisation, based on the four options given;
- *Highest university or equivalent qualification obtained*: in this category, the respondents were required to choose the applicable or equivalent category pertaining to their personal highest educational qualification obtained;

- *Current level of expertise*: the respondents were asked to rate their current level of expertise, based on three options;
- *Job satisfaction level*: this demographic question was included in order to understand the respondents' current level of job satisfaction within their organisation. The response categories consisted of three options; and
- *Intention to leave*: respondents were asked to indicate their current turnover intentions, whether they were likely to leave their current organisation in the short-term, or were currently not considering leaving at all. This demographic question consisted of four options from which they could choose.

A graphical presentation of the distributions of each of the 10 demographic categories is presented in Figure 11, together with comments on each of the distributions.

4.2.1 *Current employer*

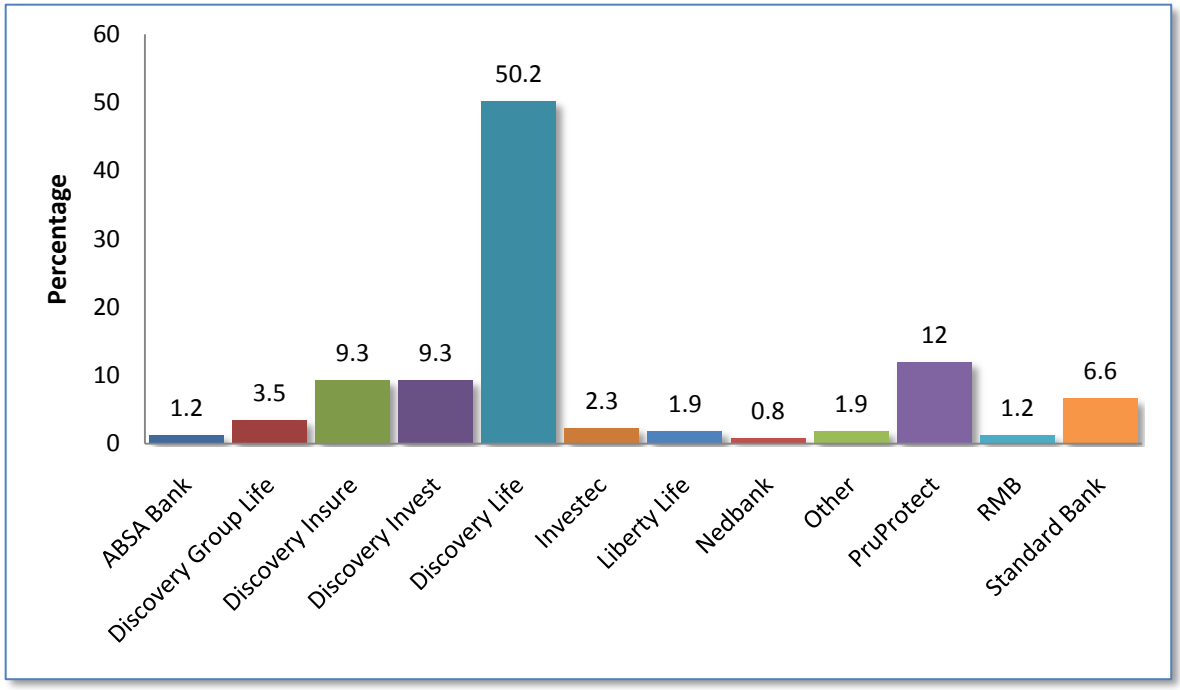


Figure 11: Distribution of respondents by current employer

The responses per financial services sector organisation received mirror largely what was expected in terms of return rates. While it would have been better from a total population perspective to have received more responses from the non-Discovery holdings group of companies this low percentage response rate (see Figure 11) from these additional companies (ABSA Bank, Investec, Liberty Life, Nedbank, Other, RMB and Standard Bank) was expected due to the convenience and self-selection sampling methodologies used.

The high rate of return (74 per cent of sampled Discovery IT professionals, as well as of the entire Discovery holdings group's financial services sector companies IT professional population) for the Discovery holding group of companies (Discovery Group Life, Discovery Insure, Discovery Invest, Discovery Life and PruProtect) was (see Table 8) also expected due to the close personal relationships between the researcher and the respondents (as well as their managers). This Discovery holdings group portion of the sample also represented 48 per cent of the total sample.

Table 8: Response rates of the Discovery Group of companies in the survey

Discovery organisation targeted	Population and number sampled	Expected returns	Actual returns
Discovery Group Life	28	15	9
Discovery Insure	24	15	24
Discovery Invest	46	30	24
Discovery Life	140	125	130
PruProtect	55	40	31
Total	**293**	**225**	**218**

4.2.2 *Race of respondent*

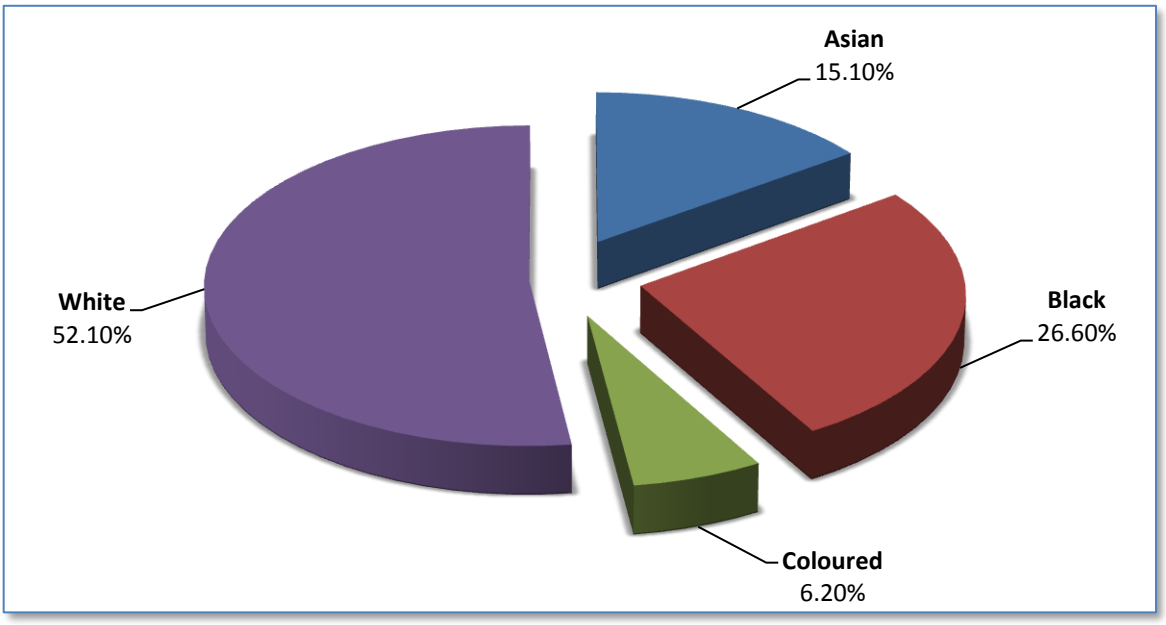


Figure 12: Distribution of respondents by race

The majority of respondents were white, at 52 per cent, with the number of black respondents numbering over a quarter of the total respondents, at 27 per cent (see Figure 12).

4.2.3 *Gender of respondent*

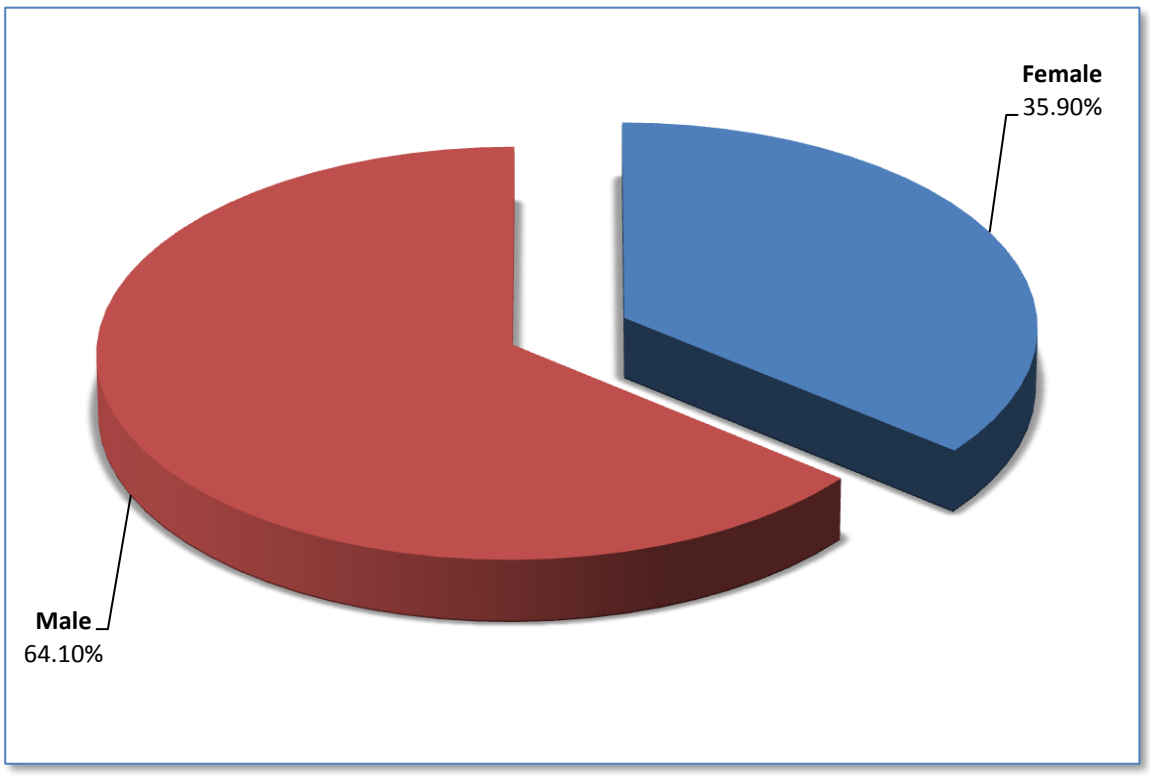


Figure 13: Distribution of respondents by gender

The number of female respondents is lower than the number of males that responded, with a 36 to 64 per cent female to male split in this category (see Figure 13). The male respondents result was slightly higher than expected.

4.2.4 *Age of respondent*

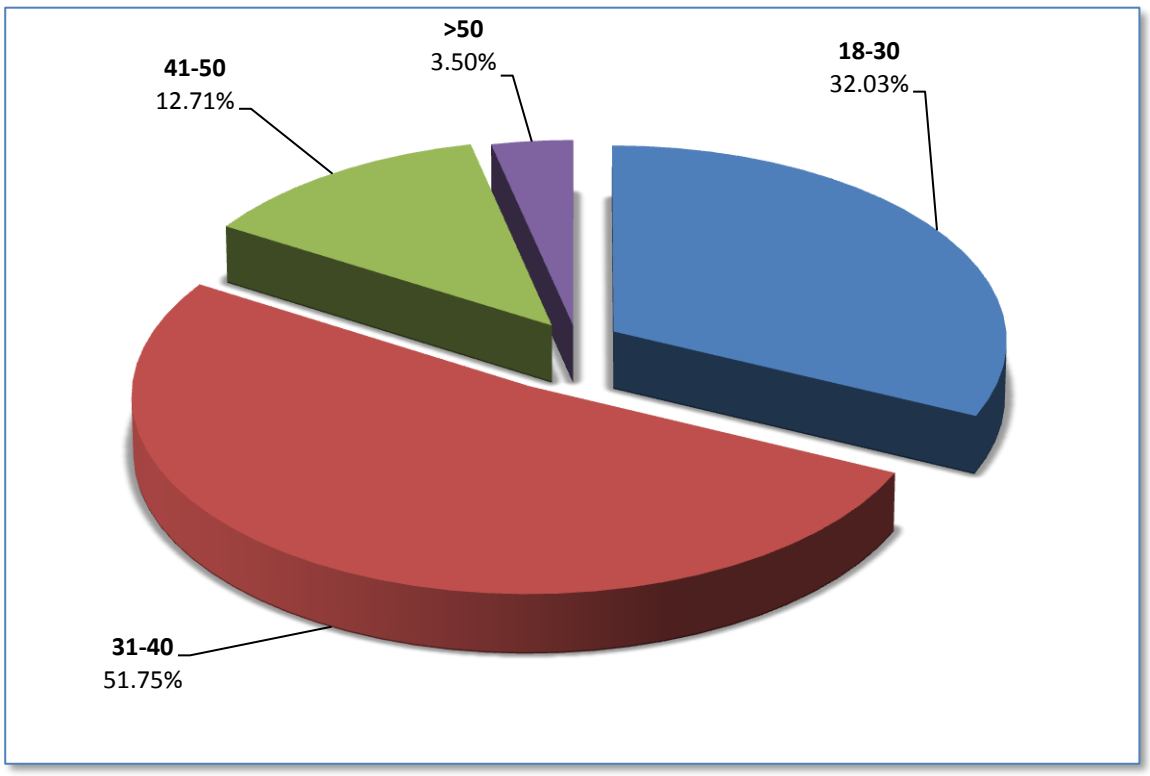


Figure 14: Distribution of respondents by age

The majority of respondents fell into the 31 to 40 year (52 per cent) and 18 to 30 year (32 per cent) age bands, with over 50 per cent being between 31 and 40 years of age (see Figure 14). Those over the age of 50 were in the minority, at just under four per cent.

4.2.5 *Number of employees in current organisation*

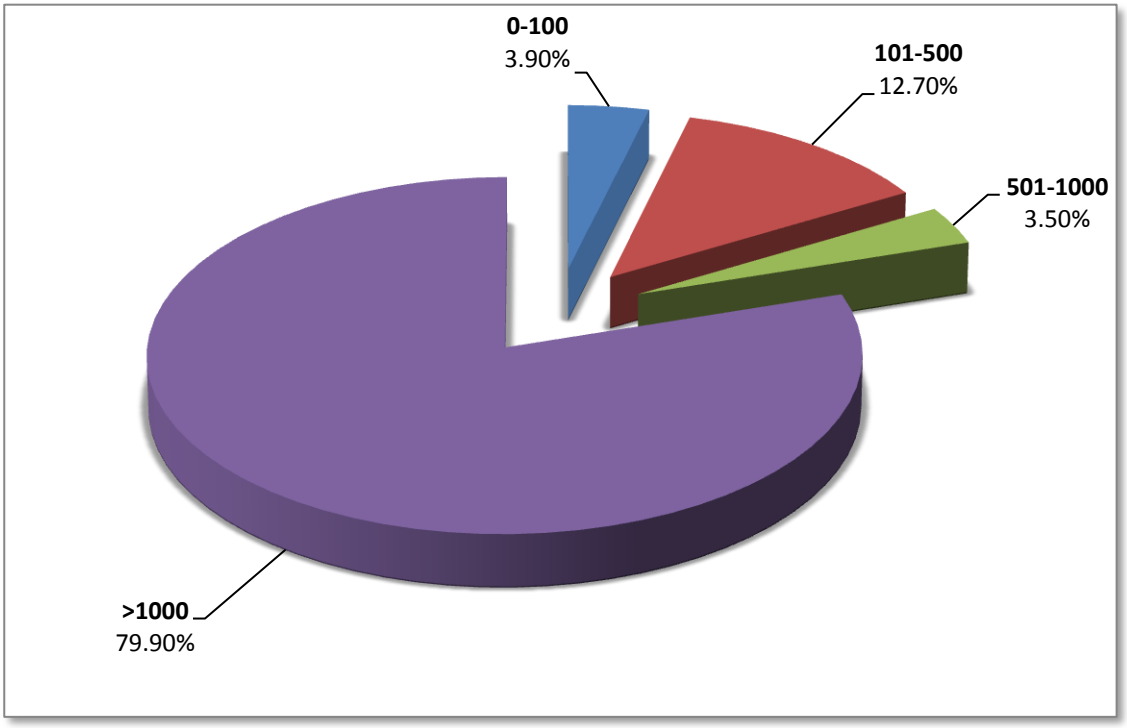


Figure 15: Distribution of respondents by number of employees in current organisation

The majority of respondents work in organisations employing a total of more than 1000 employees (80 per cent). Those companies employing the least number of total employees, between zero and 100, are in the minority, at just less than four per cent (see Figure 15). This very high percentage of respondents working for companies with more than 1000 employees was expected.

4.2.6 *Years of service with current organisation*

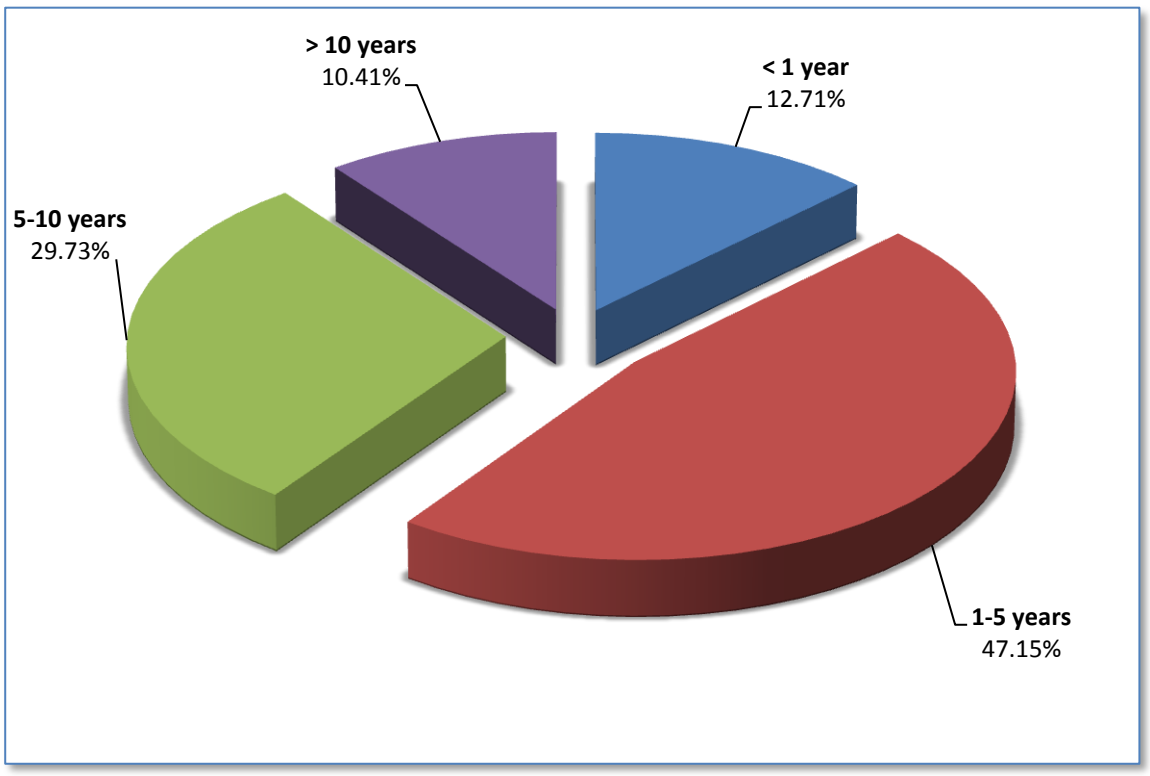


Figure 16: Distribution of respondents by years of service with current organisation

Overwhelming majority of respondents have been with their current organisation for between one and five years (47 per cent), with those at either end of the spectrum, namely less than one year (13 per cent) and more than 10 years (10 per cent), having similar minority results (see Figure 16).

4.2.7 *Highest university or equivalent qualification*

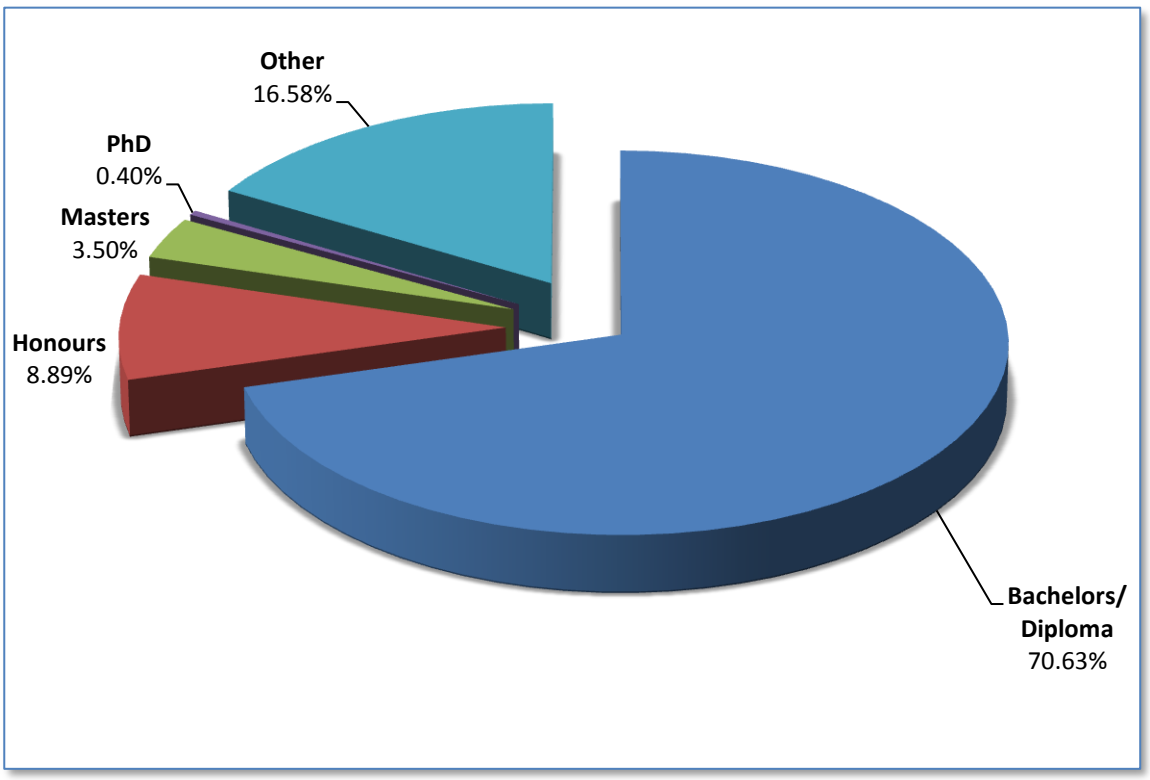


Figure 17: Distribution of respondents by highest university or equivalent qualification obtained

Eighty-four per cent of the respondents have some form of tertiary qualification, with the vast majority of these (71 per cent) having a degree or equivalent qualification (see Figure 17). The 'other' category contains predominantly those with a qualification level of matric.

4.2.8 *Current level of expertise*

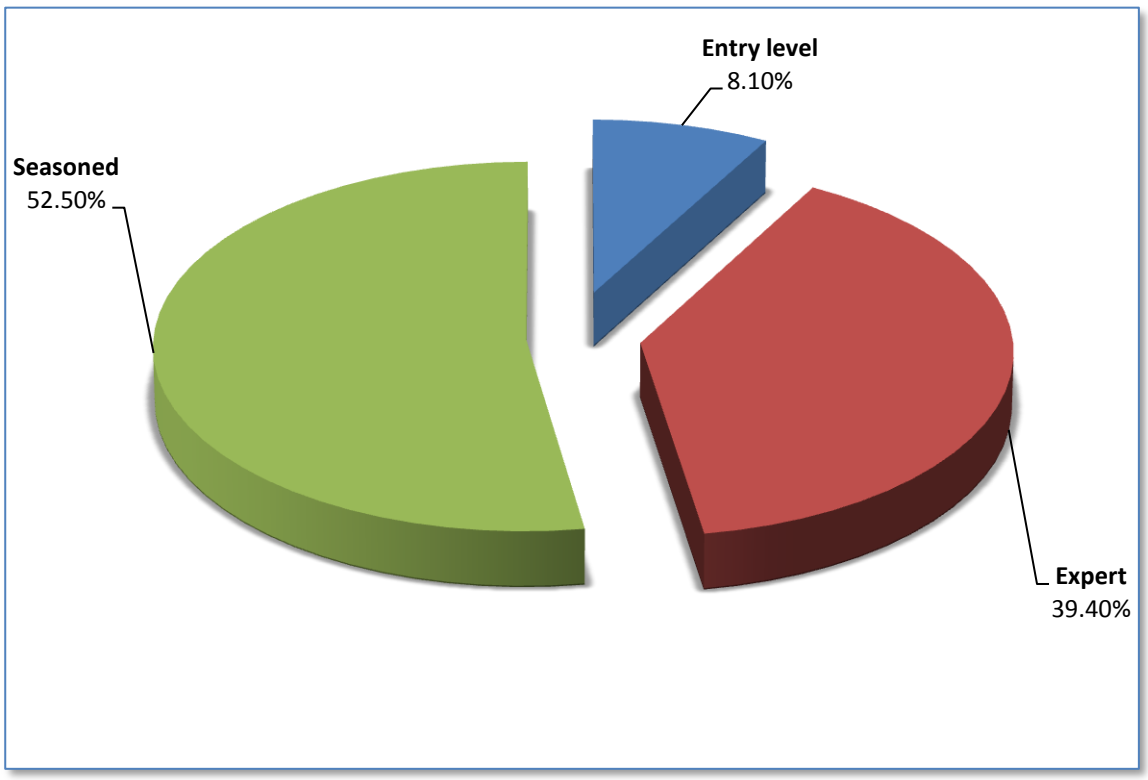


Figure 18: Distribution of respondents by current level of expertise

The highest level option in this category was ‘expert’, of which 39 per cent of respondents classified themselves as. The majority of respondents categorised themselves as ‘seasoned’ (53 per cent), which was the middle level option, with a small minority considering themselves as ‘entry level’ (eight per cent) (see Figure 18).

4.2.9 *Job satisfaction level*

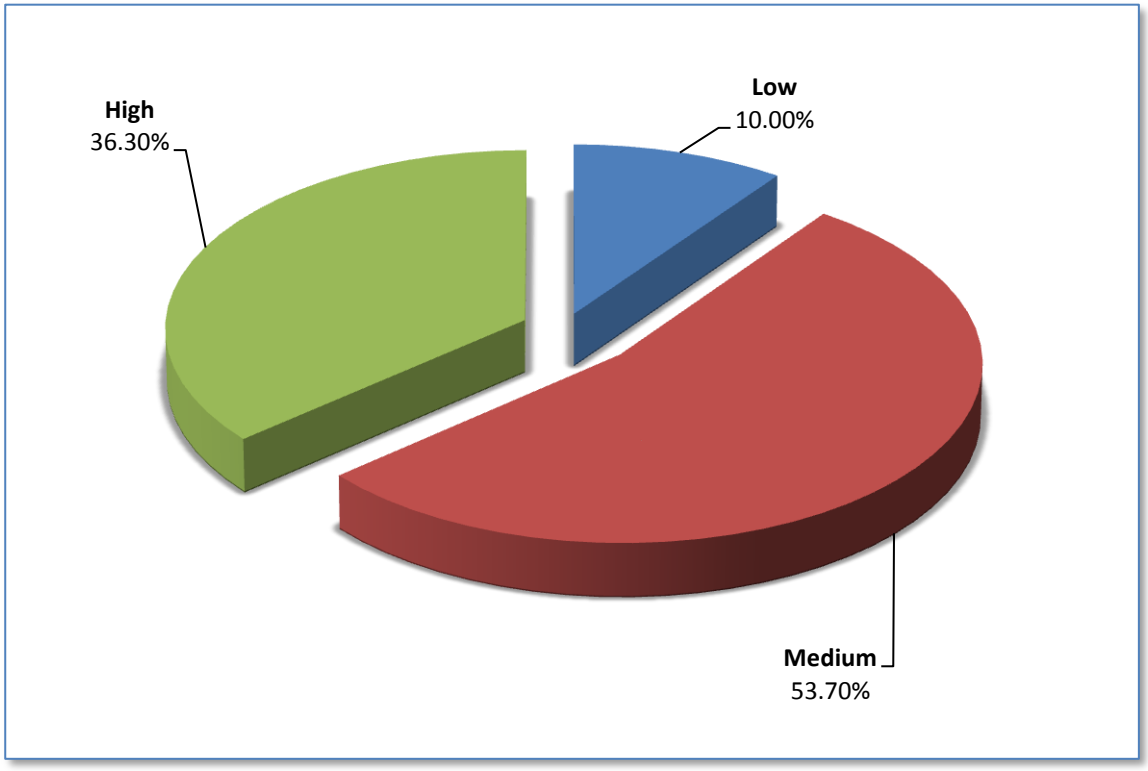


Figure 19: Distribution of respondents by job satisfaction level

The majority of the respondents are happy where they are in their current organisation, at 54 per cent, with the percentage of respondents with a low level of job satisfaction being low at 10 per cent (see Figure 19).

4.2.10 *Intention to leave current organisation*

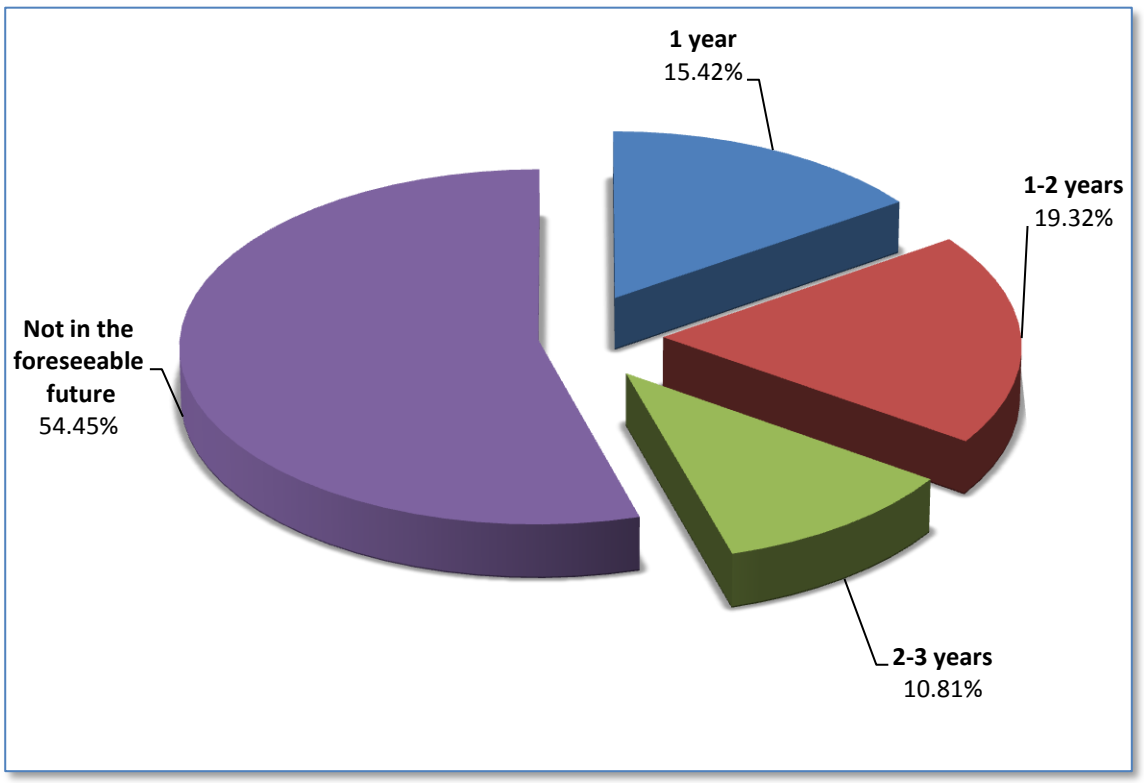


Figure 20: Distribution of respondents by intention to leave their current organisation

In a similar result to the job satisfaction levels of the respondents, the majority of respondents indicated that they were not looking to move jobs at the time of the survey (54 per cent). Of the remaining respondents, the 11 per cent would look to move within the next two to three years (see Figure 20).

4.3 Rescaling of the data

While Gaylard's (2004) study, which is compared here, made extensive use throughout of a correspondence analysis rescaling technique suggested by Bendixen and Sandler (1995), the preferred method for this research, specifically to address the research propositions pertaining to the means and standard deviations of the underlying distributions of the survey items, was to adopt the algorithmic distribution fitting approach proposed by Stacey (2005). In this study

undertaken by Stacey (2005), he demonstrated that this approach improved the reliability and validity of analysing ordinal level response data over the other two approaches researched, namely the correspondence analysis approach and an approach that assumes an equally spaced linearly correlated measurement scale with the underlying attributes.

Even one of the advocates of this interval level assumption, Labovitz (1970), advises researchers to be cautious in using this approach, stating:

> "The researcher should know and report the actual scales of his data, and any interval statistics selected should be interpreted with care. Further exploration and tests are necessary for added confidence in treating data as if they are interval. The more conservative procedure, of course, is to treat ordinal data as strictly ordinal, and thereby avoid the possibility of attributing a property to a given scale which it does not possess" (Labovitz, 1970, pp. 523-524).

In this research, therefore, the ordinal level response data was not assumed to be interval level and neither was it rescaled. Where necessary for research propositions one, two and five, the means and standard deviations were calculated using the distribution fitting algorithmic approach (Stacey, 2005).

4.4 Results pertaining to Research Proposition 1

A reproduction of Research Proposition 1 posed in Section 2.4.1, follows:

The most important retention themes that influence an IT professional's decision to remain with an organisation are:

- Work/home balance;
- Well-developed interdependence with other colleagues;
- Clear and open communication channels with direct management;
- Performance-related financial reward; and
- A performance-enabling environment.

In order to establish which statements/variables from Section 2 of the questionnaire were deemed most important by the respondents in their decision to remain with their current organisation, the data pertaining to the statements in Section 2 in answer to the question 'how important is this variable in my decision to remain with my current company?', was subjected to the normal distribution fitting approach (Stacey, 2005). The Chi^2 statistic across all of the fifty 'importance' statements was calculated as 0.9887. According to Stacey (2005), a non-significant value of the Chi^2 statistic (using a significance level of 5 per cent) is required for the model to adequately fit the survey data, as a significant value (less that 0.05) would indicate a significant difference between the survey data and the model that has been fitted. In this case, the value of 0.9887 is an almost perfect fit of the model to the data, and is therefore definitely considered adequate. The fitting of the distribution resulted in means for each of the fifty statements. These means were then ranked from largest to smallest.

The ranked statements according to mean where the statement in question is indicative of the importance of the statement in remaining with the current organisation, and where these statements are deemed to be the most influential to IT professionals, are shown in Table 9. The fully ranked list of statements according to means, for importance in remaining with the current organisation is included in Appendix C, Table 62.

Table 9: The 10 most influential retention statements according to mean

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
1	30	Having a good balance between my work and home life.	0.5037	0.8803	9.2096	0.0000
2	13	Having a competitive market-related remuneration package.	0.4857	0.8730	8.9529	0.0000
3	48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	0.4262	0.8709	7.8756	0.0000
4	23	Being financially rewarded in accordance with my contribution and performance.	0.3968	0.9047	7.0588	0.0000
5	24	Having open and honest two-way communication channels with my direct manager.	0.3915	0.8081	7.7977	0.0000
6	29	Having flexible work hours.	0.3719	0.9281	6.4488	0.0000
7	32	Having sufficient leave and the ability to exercise it when most suitable to me.	0.3492	0.9821	5.7226	0.0000
8	50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	0.3434	0.9456	5.8441	0.0000
9	8	Having a competent manager.	0.3329	0.8598	6.2310	0.0000
10	12	Having a clear understanding of what is expected of me.	0.2427	0.7307	5.3442	0.0000

The preceding top 10 statements appear to be logical groupings into the following themes (these themes were specifically described by the researcher and were not intended to map in wording, to the themes identified by Gaylard (2004)):

Statements 30, 29 and 32 all relate to personal decisions and flexibility around working hours, sufficient leave and most importantly, the right to a good balance between work and life. These statements form a logical grouping, which has been associated with the underlying theme ‘sufficient, flexible down-time’.

Statements 13, 23 and 50 all relate to the provision of remuneration that is competitive, market-related and fair in the context of experience, qualifications and comparable with colleagues in terms of performance and contribution. The underlying theme associated with these three statements is ‘commensurate remuneration’.

Statement 48 does not fit into any of the other themes and stands alone as the need to have access to the right tools to perform on the job. The theme associated with this statement is ‘accessibility to appropriate tools’.

Statements 24, 8 and 12 relate to the relationship with direct management. These statements indicate the need to open communication with direct management, respect on both sides of the relationship, which from the employees point of view indicates a satisfaction with the competency of the manager, as well as the employee understanding what is expected of them, which also relates to open communication. The underlying theme for these statements is therefore ‘open, respectful relationship with direct management’.

Of the top 10 statements (Table 9), all have a p-value in the T-test (with 257 degrees of freedom used, performing a 2-tailed test) less than the significance level of 0.05, or five per cent (see Table 9). In addition, when looking at the sign of the t-values, all of these are positive. This indicated that each statement had a significant positive difference from the statement mean, which in turn indicated that each of the top 10 statements according to mean were considered significantly important, as opposed to unimportant, in the decision to remain with the organisation.

4.4.1 *Comparison to the Gaylard results*

In order to be able to appropriately compare the current research with the Gaylard (2004) study, the 2004 Gaylard data had to be reanalysed using Stacey's (2005) distribution fitting approach. The full ranking according to means for all 50 statements relating to the question 'how important is this variable in my decision to remain with my current company?' is presented in Appendix C, Table 63. The 10 most influential retention statements according to mean, based on the reanalysed Gaylard (2004) data are presented in Table 10.

Table 10: Gaylard (2004) data reanalysed - The 10 most influential retention statements according to mean

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
1	30	Having a good balance between my work and home life.	0.6081	0.9463	9.9342	0.0000
2	48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	0.4326	1.0086	6.6312	0.0000
3	24	Having open and honest two-way communication channels with my direct manager.	0.3910	0.8824	6.8513	0.0000
4	10	Having a good working relationship with my colleagues.	0.3858	0.7103	8.3962	0.0000
5	50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	0.3638	0.8056	6.9821	0.0000
6	23	Being financially rewarded in accordance with my contribution and performance.	0.3583	0.7805	7.0967	0.0000
7	13	Having a competitive market-related remuneration package.	0.3476	0.8580	6.2629	0.0000
8	9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	0.3023	0.6924	6.7496	0.0000
9	8	Having a competent manager.	0.2951	0.8821	5.1721	0.0000
10	12	Having a clear understanding of what is expected of me.	0.2310	0.8181	4.3648	0.0000

The Chi^2 p-value across all of the fifty 'importance' questions for this research was 0.9887 and it was 1.0000 for the reanalysed Gaylard (2004) data. Both of these values are extremely high. As mentioned, the Chi^2 p-value of 0.9887 for this study represents a near perfect fit between the survey data and the fitted model. A Chi^2 p-value of 1.0000 for the fit of the Gaylard (2004) survey data to the fitted model means that the model fitted to the Gaylard (2004) survey data is a perfect fit.

In addition to the means and standard deviations calculated by the model, T-tests were performed per statement using these parametric statistics from the reanalysed Gaylard (2004) data. As with the research's results, the reanalysed Gaylard (2004) data produced values that were significantly different from the means. All of the t-values also have positive signs. Again, this indicated that each of the top 10 Gaylard (2004) statements ranked according to mean was considered significantly important in the decision to remain with the organisation.

All of the statements found in the top 10 of the original Gaylard (2004) analysis were also in the top 10 of the reanalysed Gaylard (2004) data. Only some of the rankings differed. The themes extracted by Gaylard (2004) in the original study therefore remain unchanged. The mapping of the original top 10 statements (Gaylard, 2004, p. 86) to the reanalysed top 10 statements is given in Table 11.

Table 11: Gaylard data reanalysed – Mapping of the original top 10 statements to the reanalysed top 10 statements (Gaylard, 2004, p. 86)

Statement number	Statements that influence retention decisions	Original ranking	Reanalysed ranking
30	Having a good balance between my work and home life.	1	1
48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	8	2
24	Having open and honest two-way communication channels with my direct manager.	3	3
10	Having a good working relationship with my colleagues.	2	4
50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	6	5
23	Being financially rewarded in accordance with my contribution and performance.	4	6
13	Having a competitive market-related remuneration package.	5	7
9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	7	8
8	Having a competent manager.	9	9
12	Having a clear understanding of what is expected of me.	10	10

Appendix D, Table 64 shows a full comparison of statement means and rankings between the current research and the reanalysed Gaylard (2004) results for the set of statements related to the question 'how important is this variable in my decision to remain with my current company?'.

The following eight statements are common in both lists (in the reanalysed data's list, as well as current study's list) of top 10 statements, listed from most important to eighth most important based on data from the current study:

- Having a good balance between my work and home life;
- Having a competitive market-related remuneration package;

- Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.);
- Being financially rewarded in accordance with my contribution and performance;
- Having open and honest two-way communication channels with my direct manager;
- Being fairly rewarded relative to other employees, based on my experience, qualifications and performance;
- Having a competent manager; and
- Having a clear understanding of what is expected of me.

The following two statements were in the top 10 statements for this study, but were not in the top 10 of the reanalysed Gaylard (2004) data:

- Having flexible work hours; and
- Having sufficient leave and the ability to exercise it when most suitable to me.

The following two statements were in the Gaylard (2004) reanalysed data's top 10 statements, but did not appear in this research's top 10:

- Having a good working relationship with my colleagues;
- Working in an environment, which allows me a high level of autonomy and freedom to get the work done.

Gaylard's restated Research Proposition 1, which corresponds to this study's Research Proposition 1, follows:

> "The most important retention themes that influence an IT worker's decision to remain with the company are:
>
> - Work/home balance;
> - Well-developed interdependence with other colleagues;
> - Clear and open communication channels with direct management;
> - Performance-related financial reward; and

- A performance-enabling environment" (Gaylard, 2004, pp. 118-119).

The themes that correlate between the two studies are presented in Table 12.

Table 12: Common themes found to be important in both studies

Themes extracted from this study	Themes present in the Gaylard (2004) study
Sufficient, flexible down-time	Work/home balance
Commensurate remuneration	Performance-related financial reward
Accessibility to appropriate tools	A performance-enabling environment
Open, respectful relationship with direct management	Clear and open communication channels with direct management

All of the themes identified in this research were essentially present in the Gaylard (2004) study.

The following theme was identified in the Gaylard (2004) study, which was not present in the most important themes highlighted by the current study:

- Well-developed interdependence with other colleagues.

4.4.2 *Research Proposition 1 summary*

The first research proposition posed in this study was:

The most important retention themes that influence an IT professional's decision to remain with an organisation are:

- Work/home balance;
- Well-developed interdependence with other colleagues;
- Clear and open communication channels with direct management;
- Performance-related financial reward; and
- A performance-enabling environment.

There was no difference found in the statements present in the top 10 statements influencing turnover in the original Gaylard (2004, p. 86) list as compared to the list produced from the reanalysis of the Gaylard (2004) data using the distribution fitting approach. All of the same statements were present in both lists, only the rankings within these two lists differed slightly.

Based on the logical groupings emanating from the top 10 ranked means of the statements, the following themes indicated the most important retention themes affecting the turnover intentions of IT professionals:

- Sufficient, flexible down-time;
- Commensurate remuneration;
- Accessibility to appropriate tools; and
- Open, respectful relationship with direct management.

All of the logical groupings identified in this study were also essentially present in the most important themes identified in the Gaylard (2004) study.

4.5 Results pertaining to Research Proposition 2

The research proposition posed in Section 2.4.2follows:

The traditional retention variables such as those listed will have little influence on an IT professional’s decision to remain with an organisation:

- Job security;
- Loyalty;
- Share options;
- Pension/provident scheme; and
- Health care benefits.

In order to establish which statements/variables from Section 2 of the questionnaire were deemed least important by the respondents in their decision to remain with their current organisation, the data pertaining to the statements in Section 2 in answer to the question ‘how important is this variable in my decision

to remain with my current company?', was subjected to the normal distribution fitting approach (Stacey, 2005). As mentioned in Section 4.4, the Chi^2 statistic across all of the fifty 'importance' statements was calculated as 0.9887. According to Stacey (2005), a non-significant value of the Chi^2 statistic (using a significance level of 5 per cent) is required for the model to adequately fit the survey data, as a significant value (less that 0.05) would indicate a significant difference between the survey data and the model that has been fitted. In this case, the value of 0.9887 is an almost perfect fit of the model to the data, and is therefore definitely considered adequate. The fitting of the distribution resulted in means (and standard deviations) for each of the fifty statements. The means were then ranked from largest to smallest.

The ranked statements according to mean where the statement in question is indicative of the importance or unimportance in this case, of the statement in remaining with the current organisation, and where these statements are deemed the least influential to IT professionals, are shown in Table 13. The fully ranked list of statements according to means, for importance in remaining with the current organisation is included in Appendix C, Table 62.

Table 13: The 10 least influential retention statements according to mean

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
41	6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	-0.2226	1.0036	-3.5699	0.0004
42	3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	-0.3029	0.9437	-5.1649	0.0000
43	4	Being able to do project work.	-0.3087	0.8954	-5.5476	0.0000
44	25	Having opportunities to obtain global exposure and experience.	-0.3109	1.0374	-4.8228	0.0000
45	28	Working in teams.	-0.4624	1.0346	-7.1935	0.0000
46	34	Having the freedom and time to interact socially with other employees at work.	-0.5288	0.9999	-8.5110	0.0000
47	41	Working in an ever-changing environment.	-0.6307	0.8605	-11.7957	0.0000
48	47	Having a close colleague or good friend at work.	-0.6353	1.0508	-9.7301	0.0000
49	2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	-0.6795	0.9074	-12.0528	0.0000
50	14	Being given share options in the company.	-0.7228	1.2641	-9.2023	0.0000

While the top 10 statements group logically into natural themes, the bottom 10 statements appear random, with only six of the 10 statements appearing to be

logically grouped. The following three themes have been identified for these six statements:

Statements 2 and 3 relate to job specific elements, primarily the aesthetics and safety of the physical environment and the specifications of the job itself not being too onerous, or tedious. These statements form a logical grouping, which has been associated with the underlying theme ‘job environment and requirements’.

Statements 47 and 34 relate to social interaction in the workplace. This is specifically concerned with being allowed to interact socially with colleagues and having someone in the workplace that is considered a friend. The underlying theme associated with these two statements is ‘social interaction’.

Statements 28 and 4 relate to working in teams and being given the chance to be part of a project. Working on projects more often than not implies working in teams and therefore these two statements have grouped together as a single theme, namely ‘project and teamwork’.

Statements 14, 41, 25 and 6 are all seemingly independent statements that do not relate to any underlying themes in the bottom 10 statements.

Of the bottom 10 statements (Table 13), all have a p-value in the T-test (with 257 degrees of freedom used, performing a 2-tailed test) less that the significance level of 0.05, or 5 per cent (see Table 13). In addition, when looking at the sign of the t-values, all of these are negative. This indicated that each statement had a significant negative difference from the statement mean, which in turn indicated that each of the bottom 10 statements according to mean were considered significantly unimportant, as opposed to important as in Section 4.4, in the decision to remain with the organisation.

4.5.1 *Comparison to the Gaylard results*

As mentioned in Section 4.4, in order to be able to appropriately compare the current research with the compared study, the 2004 Gaylard (2004) data was reanalysed using Stacey’s (2005) distribution fitting approach. The full ranking

according to means for all fifty statements relating to the question ‘how important is this variable in my decision to remain with my current company?’, is presented in Appendix C, Table 63. The 10 least influential retention statements according to mean, based on the reanalysed Gaylard (2004) data are presented in Table 14.

Table 14: Gaylard (2004) data reanalysed - The 10 least influential retention statements according to mean

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
41	43	Being able to positively influence peoples' lives and "make a difference".	-0.2412	0.9281	-4.0184	0.0001
42	3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	-0.2445	0.9166	-4.1244	0.0001
43	6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	-0.2701	0.9800	-4.2612	0.0000
44	2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	-0.2824	0.9604	-4.5454	0.0000
45	4	Being able to do project work.	-0.3687	1.0206	-5.5842	0.0000
46	31	Receiving medical aid benefits.	-0.4127	1.3565	-4.7033	0.0000
47	41	Working in an ever-changing environment.	-0.5270	0.8287	-9.8312	0.0000
48	34	Having the freedom and time to interact socially with other employees at work.	-0.5711	1.0058	-8.7773	0.0000
49	47	Having a close colleague or good friend at work.	-0.7189	1.1681	-9.5145	0.0000
50	14	Being given share options in the company.	-0.8016	1.1804	-10.4983	0.0000

The Chi^2 p-value across all of the fifty 'importance' questions for this research was 0.9887 and it was 1.0000 for the reanalysed Gaylard (2004) data. Both of these values are extremely high. As mentioned, the Chi^2 p-value of 0.9887 for this study represented a near perfect fit between the survey data and the fitted model. A Chi^2 p-value of 1.0000 for the fit of the Gaylard (2004) survey data to the fitted model meant that the model fitted to the Gaylard (2004) survey data was a perfect fit.

In addition to the means and standard deviations calculated by the model, T-tests were performed per statement using these parametric statistics from the reanalysed Gaylard (2004) data. As with this research's results, the reanalysed Gaylard (2004) data produced values that were significantly different from the means. All of the t-values also had negative signs. Again, this indicated that each of the bottom ten statements highlighted by the reanalysis of the Gaylard (2004) data, ranked according to mean, was considered significantly unimportant in the decision to remain with the organisation.

Eight of the statements found in the bottom 10 statements of the original Gaylard (2004) analysis were also in the bottom 10 of the reanalysed Gaylard (2004) data. The mapping of the original bottom 10 statements (Gaylard, 2004, pp. 88-89) to the reanalysed bottom 10 statements is given in Table 15.

Table 15: Gaylard data reanalysed - Mapping of the original bottom 10 statements (Gaylard, 2004, pp. 88-89) to the reanalysed bottom 10 statements

Statement number	Statements that influence retention decisions	Original ranking	Reanalysed ranking
26	Having a well-designed and adhered-to performance appraisal system.	41	37
42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	44	40
43	Being able to positively influence peoples' lives and "make a difference".	37	41
3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	34	42
6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	43	43
2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	42	44
4	Being able to do project work.	45	45
31	Receiving medical aid benefits.	47	46
41	Working in an ever-changing environment.	46	47
34	Having the freedom and time to interact socially with other employees at work.	48	48
47	Having a close colleague or good friend at work.	49	49
14	Being given share options in the company.	50	50

The following two statements were in the original Gaylard bottom 10, and not in the reanalysed Gaylard bottom 10 (Gaylard, 2004):

- Having a well-designed and adhered-to performance appraisal system; and
- Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.

The following two statements were in the reanalysed Gaylard bottom 10, but not in the original Gaylard bottom ten (Gaylard, 2004):

- Being able to positively influence peoples' lives and 'make a difference'; and
- Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.).

Taking into consideration only the bottom eight reanalysed statements due to the fact that only these eight statements were also found in the bottom 10, least important, in the original Gaylard (2004) study therefore, the following themes extracted by Gaylard in the original study remain:

- "Elements of the job itself;
- Traditional retention benefits; and
- Social interaction" (Gaylard, 2004, p. 90).

These three themes (excluding 'job-related administrative processes', which has been discarded due to their absence in the reanalysed themes) are used in the further analysis undertaken.

Appendix D, Table 64 shows a full comparison of statement means and rankings between the current research and the reanalysed Gaylard (2004) results for the set of statements related to the question 'how important is this variable in my decision to remain with my current company?' For the purposes of this study, the reanalysed bottom 10 statements (not the original bottom 10 statements) will be used for the comparison that follows.

The following eight statements are common in both lists of bottom 10 statements (listed here from least important to eighth least important for the data from this study):

- Being given share options in the company;
- Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements;

- Having a close colleague or good friend at work;
- Working in an ever-changing environment;
- Having the freedom and time to interact socially with other employees at work;
- Being able to do project work;
- Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.); and
- Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.

The following two statements were in the bottom 10 statements for this study, but were not in the bottom 10 of the reanalysed Gaylard data (2004):

- Working in teams; and
- Having opportunities to obtain global exposure and experience.

The following two statements were in the bottom 10 of the Gaylard (2004) reanalysed data, but did not appear in this research's bottom 10:

- Receiving medical aid benefits; and
- Being able to positively influence peoples' lives and 'make a difference'.

Based on these statements, there is therefore a correlation between the two studies in the following themes:

- Job environment and requirements/ elements of the job Itself; and
- Social interaction.

The 'project and teamwork' theme identified in this research was not apparent in the Gaylard (2004) study when considering the bottom 10 statements.

The following theme was identified in the Gaylard (2004, p. 90) study, which was not present in the least important themes highlighted by the current study:

- "Traditional retention benefits" (p. 90).

Gaylard's Research Proposition 2, which corresponds to this study's Research Proposition 2, follows:

> "The traditional retention variables such as those listed will have little influence on an IT worker's decision to remain with a company:
>
> - Job security;
> - Loyalty;
> - Share options;
> - Pension/Provident scheme; and
> - Health care benefits" (Gaylard, 2004, p. 51).

In this study, there were no specific themes related to the traditional retention variables as listed in the proposition, found in the statements that least influence turnover among IT professionals. The statement that came out as the least important of all the statements when it came to retention variables affecting the turnover intentions of IT professionals, was 'being given share options in the company'. This is one of the traditional retention variables however the rest of the statements in the list of 10 least important do not relate to the traditional variables in any way, and no specific theme for traditional retention variables was identified.

4.5.2 *Research Proposition 2 summary*

The second research proposition posed in this study was:

The traditional retention variables such as those listed will have little influence on an IT professional's decision to remain with an organisation:

- Job security;
- Loyalty;
- Share options;
- Pension/Provident scheme; and
- Health care benefits.

When considering the least important variables affecting the turnover intentions of IT professionals, the two lists of bottom 10 statements produced firstly through the original Gaylard research (2004, pp. 88-89), and secondly through the reanalysed Gaylard data, only have eight of the 10 statements in common. This indicates that the two different methods utilised in determining the means of the statements resulted in noticeably different results in this case.

Based on the logical groupings emanating from the bottom 10 ranked means of the statements in this study, the following themes indicate the least important retention themes affecting the turnover intentions of IT professionals:

- Job environment and requirements;
- Social interaction; and
- Project and teamwork.

Only two of the logical groupings identified in this study, namely ‘job environment and requirements’, and ‘social interaction’, were also present in the least important themes identified in the reanalysis of the Gaylard data and the Gaylard study (2004). The additional theme identified by Gaylard (2004) as one of the least important to IT professionals in their decision to remain with a company, was that of “traditional retention benefits” (Gaylard, 2004, p. 90). Gaylard’s (2004) second retention proposition specifically stated that traditional retention variables were no longer important to IT professionals, which, would have been highlighted through these statements appearing in the bottom 10, least important statements, and resulting in a theme related to the traditional retention variables. From the evidence found in the results of the analysis performed in addressing this research proposition, this could not be confirmed in this study.

4.6 Results pertaining to Research Proposition 3

The research proposition posed in Section 2.4.3 follows:

The variables that have the most influence on IT professionals' decisions to remain with an organisation may be meaningfully grouped by factor analysis into the following six factors:

- *Factor 1*: Equity and enablement for high performance;
- *Factor 2*: Liberated and empowered culture;
- *Factor 3*: Effective and interactive communication channel;
- *Factor 4*: Environment rich in personal growth opportunities;
- *Factor 5*: Standard employment contract benefits; and
- *Factor 6*: Social interaction.

In order to determine the underlying factors of the variables (statements made in the questionnaire) that affect the turnover intentions of IT professionals, an exploratory factor analysis (EFA) was performed on the data, which related to the respondents' decisions to remain with their current company. The principal axis factoring method was used.

The number of factors indicated by the requirement of eigenvalues greater than one was 10 (see Table 65 in Appendix E). The Scree plot was not conclusive but indicated possibilities of four, five or six factors (see Figure 25 in Appendix E).

Due to these divergent results using these traditional methods of factor determination, a parallel analysis was run on the data to determine the number of factors. A graphical depiction of this parallel analysis is presented in Appendix F, Figure 26. From this graphical representation, it was apparent that three eigenvalues lay completely above the line that indicates the eigenvalues from the random data. The use of parallel analysis, therefore, indicated the retention of three factors for this research proposition.

The factor analysis was run again in SPSS using a limit of three factors and a varimax rotation (see Appendix G, Table 66 for the total variance explained). The three-factor solution is discussed in more detail in the following section.

4.6.1 *The three-factor solution*

The first three factors in the three-factor solution accounted for 48.33 per cent of the total variance. The individual percentages as well as their cumulative percentages are presented in Table 16. The total variance explained for the full three-factor solution is included in Appendix G, Table 66.

Table 16: Percentage variance accounted for by each factor (three-factor solution)

Factor	% of variance	Cumulative %
Factor 1	38.571	38.571
Factor 2	5.452	44.023
Factor 3	4.306	48.330

The rotated factor analysis highlighted the variables (statements) that loaded heavily into each of the factors. All the statements with loadings greater than 0.4 were included in the factors. Full details on each of the factors, including rankings according to means, comparative Gaylard (2004) rankings, statement means, and the absolute weighted average of means are included in Appendix H.

The following three tables (Table 17 to Table 19) contain all of the statements that load into each of the three factors that make up this solution. Included in each table is the original ranking according to mean, for each statement. A short description of the factor follows each table, concluding with an appropriate, descriptive name for each.

Table 17: The statements associated with Factor 1 (three-factor solution)

FACTOR 1			
Statement number	**Loading**	**Statement**	**Ranking**
23	0.7261	Being financially rewarded in accordance with my contribution and performance.	4
11	0.7217	Working for a company which identifies and looks after its high performers.	13
13	0.7050	Having a competitive market-related remuneration package.	2
50	0.6868	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	8
39	0.6484	Working in a culture of excellence and continuous improvement.	15
24	0.6477	Having open and honest two-way communication channels with my direct manager.	5
46	0.6321	Having the opportunity to do what I do best, every day.	11
20	0.6314	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	23
37	0.6261	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	20
12	0.6163	Having a clear understanding of what is expected of me.	10
8	0.6099	Having a competent manager.	9
35	0.6019	Having an empowering and constructive working relationship with my direct manager.	18
48	0.5994	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	3
18	0.5981	Being in an environment, which encourages use of initiative without fear of punishment or failure.	14
7	0.5856	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	12
9	0.5702	Working in an environment, which allows me a high level of autonomy and freedom to get the work done.	21

FACTOR 1			
Statement number	**Loading**	**Statement**	**Ranking**
22	0.5079	Knowing that my skills and experience are sufficient for the job at hand.	17
10	0.5029	Having a good working relationship with my colleagues.	24
21	0.4862	Having a job which allows me to be creative and innovative.	19
45	0.4740	Working in an organisation which has clear and sound governance over its core activities.	32
16	0.4652	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	29
27	0.4628	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	16
15	0.4513	Seeing strong decision-making by those in authority within the organisation.	35
36	0.4453	Receiving clear and frequent communications on strategy, goals and plans.	30
30	0.4302	Having a good balance between my work and home life.	1
1	0.4249	Having a manager who really cares for me as a human being.	37
6	0.4141	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	41
29	0.4138	Having flexible work hours.	6

The eigenvalue for this first factor is 19.286 and it accounts for 38.571 per cent of the variance in the data. The loadings range from a high of 0.7261, for statement 23 in the questionnaire (‘being financially rewarded in accordance with my contribution and performance’), to a low of 0.4138, for statement 29 in the questionnaire (‘having flexible work hours’). Of the 28 statements that load into this factor, 22 rank in the top half (according to the ranking of means), and include nine of the top 10, in terms of variables that are important to the IT professional in their turnover decisions.

The 28 statements that load into this factor are concerned with fair, appropriate opportunity, reward and recognition, both personal and job-related, for agreed upon personal performance criteria, initiative and contributions in accordance with communicated corporate strategy and goals. Factor 1 has therefore been named 'performance-related opportunity, reward and recognition'.

Table 18: The statements associated with Factor 2 (three-factor solution)

FACTOR 2			
Statement number	**Loading**	**Statement**	**Ranking**
41	0.6489	Working in an ever-changing environment.	47
16	0.6116	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	29
25	0.5974	Having opportunities to obtain global exposure and experience.	44
26	0.5655	Having a well-designed and adhered to performance appraisal system.	33
43	0.5425	Being able to positively influence peoples' lives and 'make a difference'.	40
38	0.5303	Having the ability to change careers within the same organisation.	39
14	0.5289	Being given share options in the company.	50
45	0.5185	Working in an organisation which has clear and sound governance over its core activities.	32
36	0.5074	Receiving clear and frequent communications on strategy, goals and plans.	30
15	0.4892	Seeing strong decision-making by those in authority within the organisation.	35
49	0.4764	Being able to influence the kind of work that gets assigned to me.	34
34	0.4698	Having the freedom and time to interact socially with other employees at work.	46
20	0.4673	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	23
17	0.4606	Being part of a pension or provident scheme.	22
31	0.4419	Receiving medical aid benefits.	28

FACTOR 2			
Statement number	**Loading**	**Statement**	**Ranking**
42	0.4349	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	36
33	0.4342	Having my financial package structured so as to minimise my tax obligation.	25
27	0.4283	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	16
6	0.4250	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	41
44	0.4235	Having someone in the workplace who encourages my progress and development.	31
47	0.4231	Having a close colleague or good friend at work.	48
37	0.4126	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	20

The eigenvalue for this second factor is 2.726 and it accounts for 5.452 per cent of the variance in the data. The loadings range from a high of 0.6489, for statement 41 in the questionnaire (‘working in an ever-changing environment’), to a low of 0.4126, for statement 37 in the questionnaire (‘having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due’). Of the 22 statements that load into this factor, 18 rank in the bottom half (according to the ranking of means), and include four of the bottom-five, in terms of variables that are important to the IT professional in their turnover decisions.

The 22 statements that load into this factor are concerned with encouragement of varied experience and personal development in line with communicated, mutual corporate and personal goals and values in a social environment conducive to personal performance. Factor 2 has therefore been named ‘corporate alignment and personal development’.

Table 19: The statements associated with Factor 3 (three-factor solution)

FACTOR 3			
Statement number	**Loading**	**Statement**	**Ranking**
31	0.5895	Receiving medical aid benefits.	28
17	0.5698	Being part of a pension or provident scheme.	22
32	0.5654	Having sufficient leave and the ability to exercise it when most suitable to me.	7
5	0.5322	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	26
33	0.5237	Having my financial package structured so as to minimise my tax obligation.	25
44	0.4751	Having someone in the workplace who encourages my progress and development.	31
3	0.4632	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	42
30	0.4356	Having a good balance between my work and home life.	1
2	0.4260	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	49
8	0.4192	Having a competent manager.	9
34	0.4037	Having the freedom and time to interact socially with other employees at work.	46

The eigenvalue for this third factor is 2.153 and it accounts for 4.306 per cent of the variance in the data. The loadings range from a high of 0.5895, for statement 31 in the questionnaire (‘receiving medical aid benefits’), to a low of 0.4037, for statement 34 in the questionnaire (‘having the freedom and time to interact socially with other employees at work’). There were 11 statements that load into this factor and rank evenly throughout the range of rankings according to means. Worth noting is the fact that the top statement in terms of variables that are important to the IT professional in their turnover decisions, is included in this factor.

The 11 statements that load into this factor are concerned with working in a safe, secure, comfortable, social environment for a competent, encouraging manager

for traditional benefits. Factor 3 has therefore been named ‘secure working environment with traditional benefits’.

A representative 46 of the 50 statements are encompassed in the three factors. By interpreting the meaning of each of the groupings, using the variables as well as insights gained through the literature review process, the factors were named appropriately and descriptively as follows:

- *Factor 1*: Performance-related opportunity, reward and recognition;
- *Factor 2*: Corporate alignment and personal development; and
- *Factor 3*: Secure working environment with traditional benefits.

In the three-factor solution, each statement mean was weighted by the statement loading in order to determine each statement’s relative importance within the factor. These weighted means were then averaged in order to calculate the weighted average of the statement means for each factor as a whole. Each weighted average was then interpreted as the relative importance of each factor in the decision of the IT professional to remain with their current organisation. Appendix H contains the calculated values for each weighted statement mean, as well as the weighted average for each factor for the three-factor solution. Figure 21 gives a graphical summary of the relative perceived importance of the three factors in the three-factor solution. ‘corporate alignment and personal development’ is seen to be the most important of the three factors, when using the weighted average of absolute statement means.

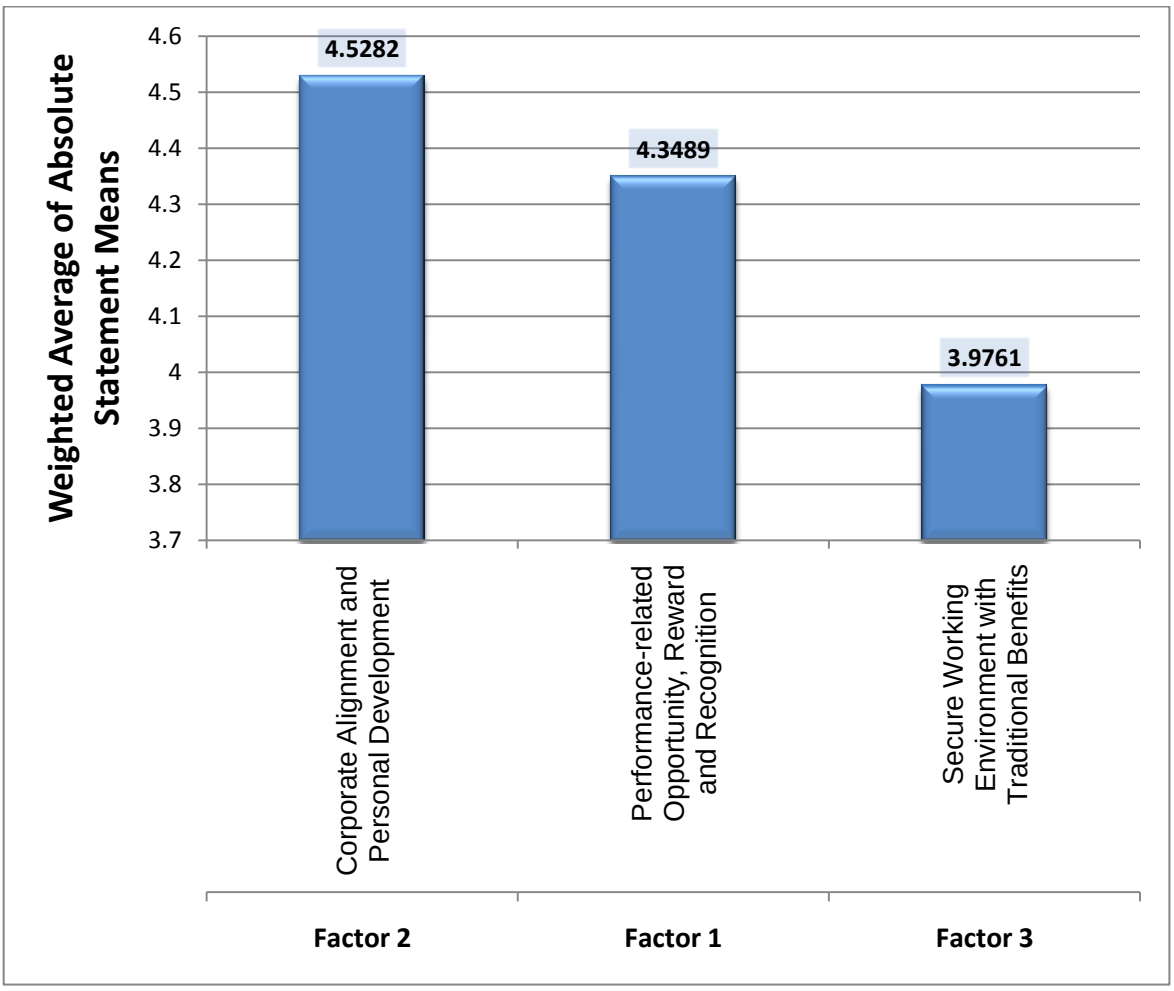


Figure 21: Relative perceived importance of the three factors (three-factor solution)

4.6.2 *Internal consistency of the three-factor solution*

In order to assess the reliability of the factors, Cronbach's coefficient alpha was calculated for each factor. Alpha values of between 0.7 and 0.8 are satisfactory when comparing groups (Bland & Altman, 1997), but a minimum value for alpha of 0.8 should be the goal for excellent internal consistency and reliability (Gifford & Cummings, 1999; Gliem & Gliem, 2003).

The overall Cronbach's Alpha coefficient for all fifty statements was 0.9596. This represents an excellent value for the coefficient and is indicative of high overall internal consistency and reliability.

The Cronbach's Alpha coefficient for each of the factors is also on the very high end of satisfactory. See Table 20 for the values for the three factors. The high values are indicative of the fact that the chosen factors reasonably represent the underlying statements.

Table 20: Ranked Cronbach's Alpha for each of the three factors (three-factor solution)

Factor	Cronbach's Alpha
Factor 1	0.9571
Factor 2	0.9274
Factor 3	0.8582

4.6.3 *The six-factor solution*

Due to the fact that this was a comparison study, and that the original Gaylard research found six factors underlying the gathered data (Gaylard, 2004), the data for this study was additionally subjected to a six-factor factor analysis.

As with the three-factor factor analysis, the six-factor factor analysis was run using principal axis factoring in SPSS using a limit of six factors and a varimax rotation (see Appendix I, Table 70 for the total variance explained). This section contains a detailed discussion on the six-factor solution.

The first six factors in the six-factor solution accounted for a cumulative 57.561 per cent of the total variance. The individual percentages as well as their cumulative percentages are presented in Table 21. The total variance explained for the full six-factor solution is included in Appendix I, Table 70.

Table 21: Percentage variance accounted for by each factor (six-factor solution)

Factor	% of variance	Cumulative %
Factor 1	38.571	38.571
Factor 2	5.452	44.023
Factor 3	4.306	48.330
Factor 4	3.303	51.632
Factor 5	3.263	54.895
Factor 6	2.666	57.561

The following six tables (Table 22 to Table 27) contain all of the statements that load into each of the six factors that make up this six-factor solution. Included in each table is the original ranking according to mean, as well as the reanalysed Gaylard (2004) ranking according to mean, for each statement. A short description of the factor follows each table, concluding with an appropriate, descriptive name for each.

Full details on each of the factors, including rankings according to means, comparative Gaylard (2004) rankings, statement means, and the absolute weighted average of means are included in Appendix J.

Table 22: The statements associated with Factor 1 (six-factor solution)

FACTOR 1				
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**
23	0.7556	Being financially rewarded in accordance with my contribution and performance.	4	6
13	0.7142	Having a competitive market-related remuneration package.	2	7
50	0.7110	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	8	5
11	0.6765	Working for a company which identifies and looks after its high performers.	13	20
24	0.5782	Having open and honest two-way communication channels with my direct manager.	5	3
7	0.5224	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	12	16
8	0.5158	Having a competent manager.	9	9
18	0.4831	Being in an environment which encourages use of initiative without fear of punishment or failure.	14	12
15	0.4789	Seeing strong decision-making by those in authority within the organisation.	35	30
35	0.4593	Having an empowering and constructive working relationship with my direct manager.	18	24
12	0.4548	Having a clear understanding of what is expected of me.	10	10
37	0.4448	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	20	19
20	0.4253	Having a clear understanding of my goals, and why they are	23	27

FACTOR 1				
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**
		important in ensuring the success of the organisation.		
39	0.4236	Working in a culture of excellence and continuous improvement.	15	22
9	0.4097	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	21	8
48	0.4085	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	3	2

The eigenvalue for factor one in the six-factor solution is 19.286 and it accounts for 38.571 per cent of the variance. The loadings range from a high of 0.7556, for statement 23 in the questionnaire ('being financially rewarded in accordance with my contribution and performance'), to a low of 0.4085, for statement 48 in the questionnaire ('having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)'). Of the 16 statements that load into this factor, 15 rank in the top half (according to the ranking of means), and include seven of the top 10, in terms of variables that are important to the IT professional in their turnover decisions.

The 16 statements that load into this factor are concerned with direct line management's honest communication of expectations and career growth opportunities in line with personal goals and interests as well as the company's goals through effective performance appraisal and management processes and being rewarded commensurately for high performance. Factor 1 has therefore been named 'liberating, enabling and rewarding personal work experience'.

Table 23: The statements associated with Factor 2 (six-factor solution)

FACTOR 2				
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**
41	0.6119	Working in an ever-changing environment.	47	47
34	0.5882	Having the freedom and time to interact socially with other employees at work.	46	48
47	0.5486	Having a close colleague or good friend at work.	48	49
43	0.5070	Being able to positively influence peoples' lives and 'make a difference'.	40	41
49	0.5049	Being able to influence the kind of work that gets assigned to me.	34	33
14	0.5041	Being given share options in the company.	50	50
40	0.4669	Having fun on the job.	27	28
45	0.4608	Working in an organisation which has clear and sound governance over its core activities.	32	38
15	0.4431	Seeing strong decision-making by those in authority within the organisation.	35	30
42	0.4343	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	36	40
16	0.4343	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	29	21
38	0.4292	Having the ability to change careers within the same organisation.	39	35

The eigenvalue for Factor 2 in the six-factor solution is 2.726 and it accounts for 5.452 per cent of the variance. The loadings range from a high of 0.6119, for

statement 41 in the questionnaire (‘working in an ever-changing environment’), to a low of 0.4292, for statement 38 in the questionnaire (‘having the ability to change careers within the same organisation’). Of the 12 statements that load into this factor, all rank in the bottom half (according to the ranking of means), and include four of the bottom five, in terms of variables that are important to the IT professional in their turnover decisions.

The 12 statements that load into this factor are concerned with being part of an organisation with strong ethics, governance and leadership together with working in a social, fun, changing environment with influence over personal tasks and career options, such as purely technical career goals, through training and career moves within the organisation as well as being able to positively influence the lives of others. Factor 2 has therefore been named ‘freedom to determine personal and organisational destiny’.

Table 24: The statements associated with Factor 3 (six-factor solution)

FACTOR 3				
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**
27	0.6861	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	16	13
21	0.6036	Having a job which allows me to be creative and innovative.	19	17
46	0.4878	Having the opportunity to do what I do best, every day.	11	25
20	0.4818	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	23	27
39	0.4789	Working in a culture of excellence and continuous improvement.	15	22
18	0.4649	Being in an environment which encourages use of initiative without fear of punishment or failure.	14	12
26	0.4216	Having a well-designed and adhered to performance appraisal system.	33	37
25	0.4205	Having opportunities to obtain global exposure and experience.	44	36
37	0.4167	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	20	19
16	0.4016	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	29	21

The eigenvalue for Factor 3 in the six-factor solution is 2.153 and it accounts for 4.306 per cent of the variance. The loadings range from a high of 0.6861, for statement 27 in the questionnaire (‘having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways’), to a low of 0.4016, for statement 16 in the questionnaire (‘having available a wide variety of

training programmes and being supported and encouraged to improve my skills through training'). Of the 10 statements that load into this factor, seven rank in the top half (according to the ranking of means), in terms of variables that are important to the IT professional in their turnover decisions.

The 10 statements that load into this factor are concerned with daily tasks involving creativity and innovation in a supportive culture of excellence and continuous improvement through supported training where personal goals can be directly mapped to personal and organisational success. Factor 3 has therefore been named 'inspiring, supportive, learning culture'.

Table 25: The statements associated with Factor 4 (six-factor solution)

FACTOR 4				
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**
17	0.6891	Being part of a pension or provident scheme.	22	14
31	0.6806	Receiving medical aid benefits.	28	46
33	0.6406	Having my financial package structured so as to minimise my tax obligation.	25	32
32	0.5376	Having sufficient leave and the ability to exercise it when most suitable to me.	7	11
5	0.4933	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	26	18

The eigenvalue for Factor 4 in the six-factor solution is 1.651 and it accounts for 3.303 per cent of the variance. The loadings range from a high of 0.6891, for statement 17 in the questionnaire ('being part of a pension or provident scheme'), to a low of 0.4933, for statement 5 in the questionnaire ('having a sense of security that my job is not threatened and is mine as long as I'd like it'). Of the five statements that load into this factor, four rank within five positions of the middle (according to the ranking of means), in terms of variables that are important to the IT professional in their turnover decisions.

The five statements that load into this factor are concerned with the provision of traditional benefits, package structure and job security. Factor 4 has therefore been named ‘traditional employment provisions’.

Table 26: The statements associated with Factor 5 (six-factor solution)

FACTOR 5				
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**
10	0.5613	Having a good working relationship with my colleagues.	24	4
6	0.5331	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	41	43
8	0.5168	Having a competent manager.	9	9
28	0.4689	Working in teams.	45	39

The eigenvalue for Factor 5 in the six-factor solution is 1.631 and it accounts for 3.263 per cent of the variance. The loadings range from a high of 0.5613, for statement 10 in the questionnaire (‘having a good working relationship with my colleagues’), to a low of 0.4689, for statement 28 in the questionnaire (‘working in teams’). Of the four statements that load into this factor, two rank in the bottom 10 (according to the ranking of means), in terms of variables that are important to the IT professional in their turnover decisions.

The four statements that load into this factor are concerned with working together with team colleagues towards shared corporate goals. Factor 5 has therefore been named ‘constructive teamwork’.

Table 27: The statements associated with Factor 6 (six-factor solution)

FACTOR 6				
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**
30	0.5048	Having a good balance between my work and home life.	1	1
29	0.4641	Having flexible work hours.	6	15
32	0.4259	Having sufficient leave and the ability to exercise it when most suitable to me.	7	11
46	0.4221	Having the opportunity to do what I do best, every day.	11	25
48	0.4189	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	3	2
3	0.4092	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	42	42

The eigenvalue for Factor 6 in the six-factor solution is 1.333 and it accounts for 2.666 per cent of the variance. The loadings range from a high of 0.5048, for statement 30 in the questionnaire (‘having a good balance between my work and home life’), to a low of 0.4092, for statement 3 in the questionnaire (‘working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)’). Of the six statements that load into this factor, five rank in the top half (according to the ranking of means), and include four of the top seven, in terms of variables that are important to the IT professional in their turnover decisions.

The six statements that load into this factor are concerned with having sufficient non-work time, the right tools and working environment to perform optimally. Factor 6 has therefore been named ‘adequate provision to enable optimal performance’.

A representative 42 of the 50 statements are encompassed in the six factors. All of the top fifteen of the most important statements, as determined by the participant IT professionals in this study in their intention to leave their organisation, are included in the factors of this factor analysis. By interpreting the meaning of each of the groupings, using the variables as well as insights gained through the literature review process, the factors were named appropriately and descriptively as follows:

- Factor 1: Liberating, enabling and rewarding personal work experience;
- Factor 2: Freedom to determine personal and organisational destiny;
- Factor 3: Inspiring, supportive, learning culture;
- Factor 4: Traditional employment provisions;
- Factor 5: Constructive teamwork; and
- Factor 6: Adequate provision to enable optimal performance.

In the six-factor solution, each statement mean was weighted by the statement loading in order to determine each statement's relative importance within the factor. These weighted means were then averaged in order to calculate the weighted average of the statement means for each factor as a whole. Each weighted average was then interpreted as the relative importance of each factor in the decision of the IT professional to remain with their current organisation. Appendix J contains the calculated values for each weighted statement mean, as well as the weighted average for each factor for the six-factor solution. Figure 22 gives a graphical summary of the relative perceived importance of the six factors in the six-factor solution. 'traditional employment provisions' is seen to be the most important of the six factors, when using the weighted average of absolute statement means.

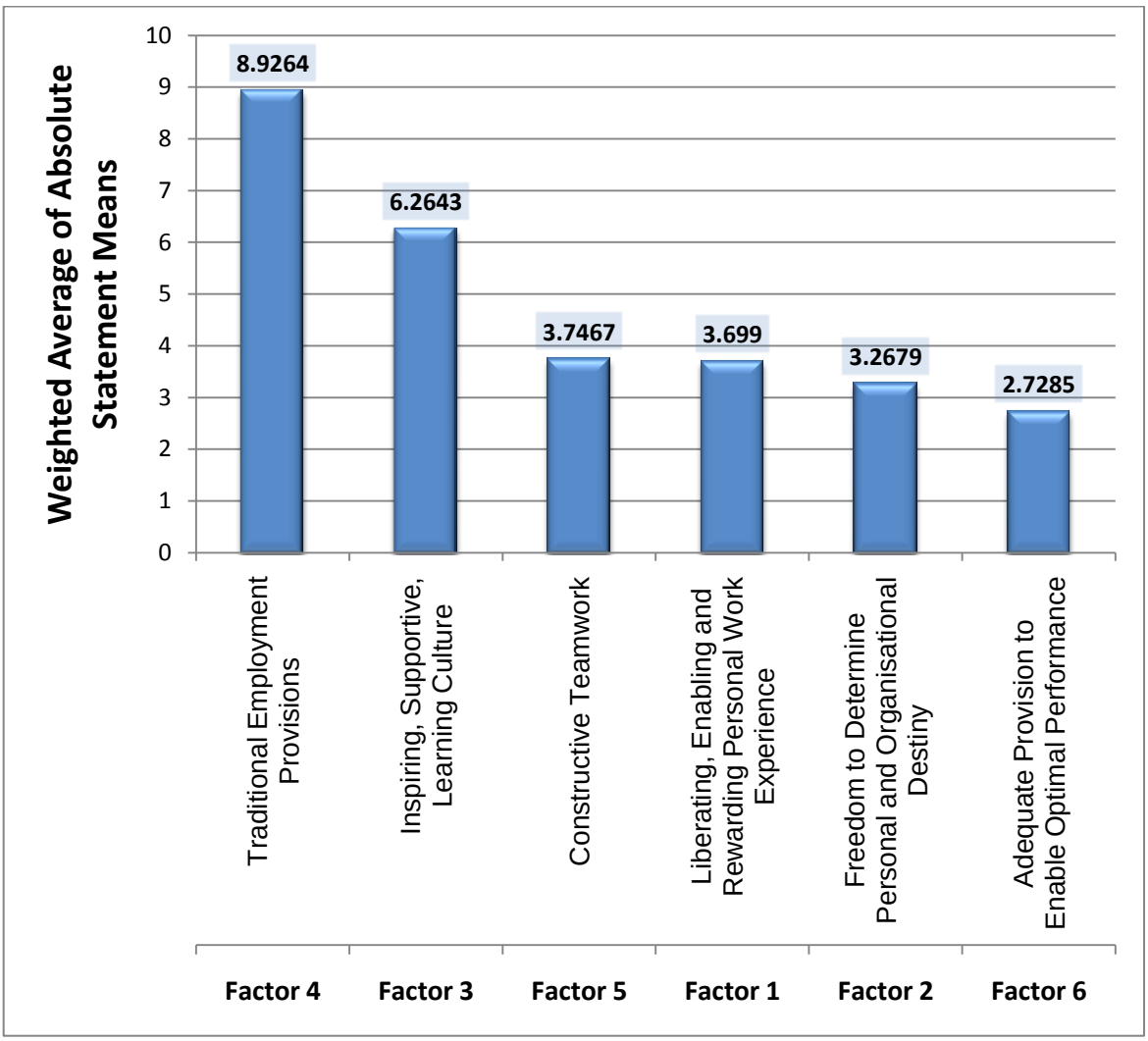


Figure 22: Relative perceived importance of the six factors (six-factor solution)

4.6.4 *Internal consistency of the six-factor solutions*

In order to assess the reliability of the factors, Cronbach's coefficient alpha was calculated for each factor. Alpha values of between 0.7 and 0.8 are satisfactory when comparing groups (Bland & Altman, 1997), but a minimum value for alpha of 0.8 should be the goal for excellent internal consistency and reliability (Gifford & Cummings, 1999; Gliem & Gliem, 2003).

As mentioned in Section 4.6.2, the overall Cronbach's Alpha coefficient for all fifty statements was 0.9596. This represents a very high value for the coefficient and is indicative of high overall internal consistency and reliability.

The Cronbach's Alpha coefficient for each of these factors is also very satisfactory; see Table 28 for the ranked values for the six factors. These high values are indicative of the fact that the chosen factors reasonably represent the underlying statements.

Table 28: Ranked Cronbach's Alpha for each of the six factors (six-factor solution)

Factor	Cronbach's Alpha
Factor 1	0.9425
Factor 3	0.8999
Factor 2	0.8702
Factor 4	0.8449
Factor 6	0.7913
Factor 5	0.7539

4.6.5 *Comparison to the reanalysed Gaylard six-factor solution*

The Gaylard (2004) data was reanalysed in order to use the raw data and not the rescaled data, as had been the case in the original Gaylard (2004) study. The Gaylard (2004) original six-factor solution details are replicated in Appendix J (Table 72 – Factor 1, Table 74 – Factor 2, Table 76 – Factor 3, Table 78 – Factor 4, Table 80 – Factor 5 and Table 82 – Factor 6) (Gaylard, 2004, pp. 93-100). As with the other factor analyses in this study, principal axis factoring was used together with the pre-determined number of six factors and a varimax rotation. The intuitive meaning of each grouping was also inferred and each factor was then aptly named.

The first six factors in the six-factor solution accounted for a cumulative total of 57.955 per cent of the total variance. This is marginally better than the six-factor

solution in the current research, where 57.561 per cent of the total variance was accounted for by the factor solution. The individual percentages as well as their cumulative percentages are presented in Table 29. The total variance explained for the full Gaylard (2004) reanalysed six-factor solution is included in Appendix K, Table 83.

Table 29: Percentage variance accounted for by each factor (Gaylard's (2004) reanalysed six-factor solution)

Factor	% of variance	Cumulative %
Factor 1	39.978	39.978
Factor 2	5.129	45.107
Factor 3	4.315	49.422
Factor 4	3.122	52.544
Factor 5	2.918	55.462
Factor 6	2.494	57.955

The following six tables (Table 30 to Table 35) contain all of the statements that load into each of the six factors that make up this six-factor solution based on Gaylard's (2004) original data. Included in each table is this study's original ranking according to mean, as well as the reanalysed Gaylard (2004) ranking according to mean, for each statement. A short description of the factor follows each table, concluding with an appropriate, descriptive name for each.

Full details on each of the factors, including rankings according to means for this reanalysed data, comparative rankings of means to the current study, Gaylard (2004) reanalysed statement means, and the absolute weighted average of means for the Gaylard (2004) reanalysed statements are included in Appendix L.

Table 30: The statements associated with Factor 1 (Gaylard's (2004) reanalysed six-factor solution)

FACTOR 1				
Statement number	**Loading**	**Statement**	**Gaylard (2004) ranking**	**Ranking**
30	0.6364	Having a good balance between my work and home life.	1	1
50	0.6203	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	5	8
23	0.5931	Being financially rewarded in accordance with my contribution and performance.	6	4
10	0.5869	Having a good working relationship with my colleagues.	4	24
12	0.5718	Having a clear understanding of what is expected of me.	10	10
13	0.5685	Having a competitive market-related remuneration package.	7	2
46	0.5521	Having the opportunity to do what I do best, every day.	25	11
8	0.5414	Having a competent manager.	9	9
22	0.5076	Knowing that my skills and experience are sufficient for the job at hand.	23	17
48	0.5001	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	2	3
2	0.4749	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	44	49
1	0.4722	Having a manager who really cares for me as a human being.	26	37
37	0.4705	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	19	20
24	0.4684	Having open and honest two-way communication channels with my direct manager.	3	5

FACTOR 1				
Statement number	Loading	Statement	Gaylard (2004) ranking	Ranking
32	0.4595	Having sufficient leave and the ability to exercise it when most suitable to me.	11	7
5	0.4581	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	18	26
35	0.4563	Having an empowering and constructive working relationship with my direct manager.	24	18
29	0.4497	Having flexible work hours.	15	6
42	0.4303	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	40	36
16	0.4063	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	21	29
39	0.4043	Working in a culture of excellence and continuous improvement.	22	15

The eigenvalue for Factor 1 in the Gaylard (2004) reanalysed six-factor solution is 19.989 and it accounts for 39.978 per cent of the variance. The loadings range from a high of 0.6364, for statement 30 in the questionnaire (‘having a good balance between my work and home life’), to a low of 0.4043, for statement 39 in the questionnaire (‘working in a culture of excellence and continuous improvement’). Of the 21 statements that load into this factor, 18 rank in the top half of the means rankings (the ranking of means of the reanalysed Gaylard (2004) data), and include nine of the top 10, in terms of variables that are important to the IT professional in their turnover decisions.

The 21 statements that load into this factor are concerned with being fairly rewarded, both tangible and intangible, for optimal performance, and being recognised for skills through honest, constructive communication; and

relationships with direct line managers, provision of tools and opportunities for training and continuous improvement. Factor 1 has therefore been named ‘fair reward through recognition, communication, training and adequate tools’.

Table 31: The statements associated with Factor 2 (Gaylard’s (2004) reanalysed six-factor solution)

FACTOR 2				
Statement number	**Loading**	**Statement**	**Gaylard (2004) ranking**	**Ranking**
24	0.6140	Having open and honest two-way communication channels with my direct manager.	3	5
6	0.5971	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	43	41
36	0.5709	Receiving clear and frequent communications on strategy, goals and plans.	34	30
19	0.5306	Having a sense of loyalty to remain with and continue to serve the organisation.	29	38
45	0.4957	Working in an organisation which has clear and sound governance over its core activities.	38	32
26	0.4895	Having a well-designed and adhered to performance appraisal system.	37	33
11	0.4870	Working for a company which identifies and looks after its high performers.	20	13
35	0.4771	Having an empowering and constructive working relationship with my direct manager.	24	18
20	0.4754	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	27	23
37	0.4498	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	19	20
44	0.4240	Having someone in the workplace	31	31

FACTOR 2				
Statement number	**Loading**	**Statement**	**Gaylard (2004) ranking**	**Ranking**
		who encourages my progress and development.		
39	0.4110	Working in a culture of excellence and continuous improvement.	22	15
46	0.4086	Having the opportunity to do what I do best, every day.	25	11

The eigenvalue for Factor 2 in the Gaylard (2004) reanalysed six-factor solution is 2.565 and it accounts for 5.129 per cent of the variance. The loadings range from a high of 0.6140, for statement 24 in the questionnaire ('having open and honest two-way communication channels with my direct manager'), to a low of 0.4086, for statement 46 in the questionnaire ('having the opportunity to do what I do best, every day'). Of the 13 statements that load into this factor, the rankings are very evenly split - six rank in the top half of the means rankings and seven in the bottom half (the ranking of means of the reanalysed Gaylard (2004) data), in terms of variables that are important to the IT professional in their turnover decisions.

The 13 statements that load into this factor are concerned with being motivated to remain loyal to an organisation where personal high performance, excellence and continuous improvement are valued and communication encouraging interactions with direct management, receiving clear corporate communication and having the knowledge that good corporate governance is in place. Factor 2 has therefore been named 'personal and corporate motivation to remain loyal'.

Table 32: The statements associated with Factor 3 (Gaylard's (2004) reanalysed six-factor solution)

FACTOR 3				
Statement number	**Loading**	**Statement**	**Gaylard (2004) ranking**	**Ranking**
7	0.7384	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	16	12
25	0.5305	Having opportunities to obtain global exposure and experience.	36	44
6	0.4628	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	43	41
38	0.4588	Having the ability to change careers within the same organisation.	35	39
16	0.4390	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	21	29
26	0.4166	Having a well-designed and adhered to performance appraisal -system.	37	33
4	0.4005	Being able to do project work.	45	43

The eigenvalue for Factor 3 in the Gaylard (2004) reanalysed six-factor solution is 2.157 and it accounts for 4.315 per cent of the variance. The loadings range from a high of 0.7384, for statement 7 in the questionnaire ('knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals'), to a low of 0.4005, for statement 4 in the questionnaire ('being able to do project work'). Of the seven statements that load into this factor, five rank in the bottom half of the means rankings (the ranking of means of the reanalysed Gaylard (2004) data), but these only include two of the bottom 10, in terms of variables that are important to the IT professional in their turnover decisions.

The seven statements that load into this factor are concerned with knowing there will be alignment of personal goals with corporate goals through well-designed career path mapping and performance appraisal processes such that career changes, global exposure and training will all be possible. Factor 3 has therefore been named ‘enabling performance and career management processes’.

Table 33: The statements associated with Factor 4 (Gaylard’s (2004) reanalysed six-factor solution)

FACTOR 4				
Statement number	**Loading**	**Statement**	**Gaylard (2004) ranking**	**Ranking**
21	0.5809	Having a job which allows me to be creative and innovative.	17	19
18	0.5771	Being in an environment which encourages use of initiative without fear of punishment or failure.	12	14
9	0.4788	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	8	21
39	0.4629	Working in a culture of excellence and continuous improvement.	22	15
27	0.4568	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	13	16
43	0.4522	Being able to positively influence peoples’ lives and ‘make a difference’.	41	40

The eigenvalue for Factor 4 in the Gaylard (2004) reanalysed six-factor solution is 1.561 and it accounts for 3.122 per cent of the variance. The loadings range from a high of 0.5809, for statement 21 in the questionnaire (‘having a job which allows me to be creative and innovative’), to a low of 0.4522, for statement 43 in the questionnaire (‘Being able to positively influence peoples’ lives and ‘make a difference’’). Of the six statements that load into this factor, five rank in the top half of the means rankings (the ranking of means of the reanalysed Gaylard (2004)

data), in terms of variables that are important to the IT professional in their turnover decisions.

The six statements that load into this factor are concerned with working in an environment high in autonomy and freedom, enabling creativity, innovation and initiative without recrimination, where excellence and continuous improvement are encouraged through skills enhancement. Factor 4 has therefore been named 'Self-motivated, creative and innovative environment'.

Table 34: The statements associated with Factor 5 (Gaylard's (2004) reanalysed six-factor solution)

FACTOR 5				
Statement number	**Loading**	**Statement**	**Gaylard (2004) ranking**	**Ranking**
47	0.6315	Having a close colleague or good friend at work.	49	48
34	0.5291	Having the freedom and time to interact socially with other employees at work.	48	46
40	0.5095	Having fun on the job.	28	27
41	0.4985	Working in an ever-changing environment.	47	47
28	0.4259	Working in teams.	39	45

The eigenvalue for Factor 5 in the Gaylard (2004) reanalysed six-factor solution is 1.459 and it accounts for 2.918 per cent of the variance. The loadings range from a high of 0.6315, for statement 47 in the questionnaire ('having a close colleague or good friend at work'), to a low of 0.4259, for statement 28 in the questionnaire ('working in teams'). Of the five statements that load into this factor, three rank in the bottom half of the means rankings (the ranking of means of the reanalysed Gaylard (2004) data), and consist of three of the bottom four, in terms of variables that are important to the IT professional in their turnover decisions.

The five statements that load into this factor are concerned with having good relationships with colleagues and team members such that, when the opportunity

arises, social interaction and fun is encouraged. Factor 5 has therefore been named ‘social Interaction and teamwork’.

Table 35: The statements associated with Factor 6 (Gaylard’s (2004) reanalysed six-factor solution)

FACTOR 6				
Statement number	**Loading**	**Statement**	**Gaylard (2004) ranking**	**Ranking**
31	0.6537	Receiving medical aid benefits.	46	28
17	0.6524	Being part of a pension or provident scheme.	14	22
14	0.5575	Being given share options in the company.	50	50
32	0.5300	Having sufficient leave and the ability to exercise it when most suitable to me.	11	7

The eigenvalue for Factor 6 in the Gaylard (2004) reanalysed six-factor solution is 1.247 and it accounts for 2.494 per cent of the variance. The loadings range from a high of 0.6537, for statement 31 in the questionnaire (‘receiving medical aid benefits’), to a low of 0.5300, for statement 32 in the questionnaire (‘having sufficient leave and the ability to exercise it when most suitable to me’). Of the four statements that load into this factor, two rank in the top half and two in the bottom half (according to the ranking of means of the reanalysed Gaylard (2004) data), in terms of variables that are important to the IT professional in their turnover decisions.

The four statements that load into this factor are concerned with the provision of traditional benefits. Factor 6 has therefore been named ‘traditional employment benefits’.

A representative 46 of the 50 statements are encompassed in the six factors resulting from the reanalysed Gaylard (2004) data. All of the top 15 of the most important statements, as determined by the participant IT professionals in this study in their intention to leave their organisation, are included in the factors of this

factor analysis. By interpreting the meaning of each of the reanalysed Gaylard (2004) groupings, the factors were named appropriately and descriptively as follows:

- *Factor 1*: Fair reward through recognition, communication, training and adequate tools;
- *Factor 2*: Personal and corporate motivation to remain loyal;
- *Factor 3*: Enabling performance and career management processes;
- *Factor 4*: Self-motivated, creative and innovative environment;
- *Factor 5*: Social interaction and teamwork; and
- *Factor 6*: Traditional employment benefits.

In the Gaylard (2004) reanalysed six-factor solution, each statement mean was weighted by the statement loading in order to determine each statement's relative importance within the factor. These weighted means were then averaged in order to calculate the weighted average of the statement means for each factor as a whole. Each weighted average was then interpreted as the relative importance of each factor in the decision of the IT professional to remain with their current organisation. Appendix L contains the calculated values for each weighted statement mean, as well as the weighted average for each factor for the six-factor solution. Figure 23 gives a graphical summary of the relative perceived importance of the six factors in the six-factor solution derived from the reanalysed Gaylard (2004) data. 'Personal and corporate motivation to remain loyal' is seen to be the most important of the six factors resulting from the reanalysed Gaylard (2004) data, when using the weighted average of absolute statement means.

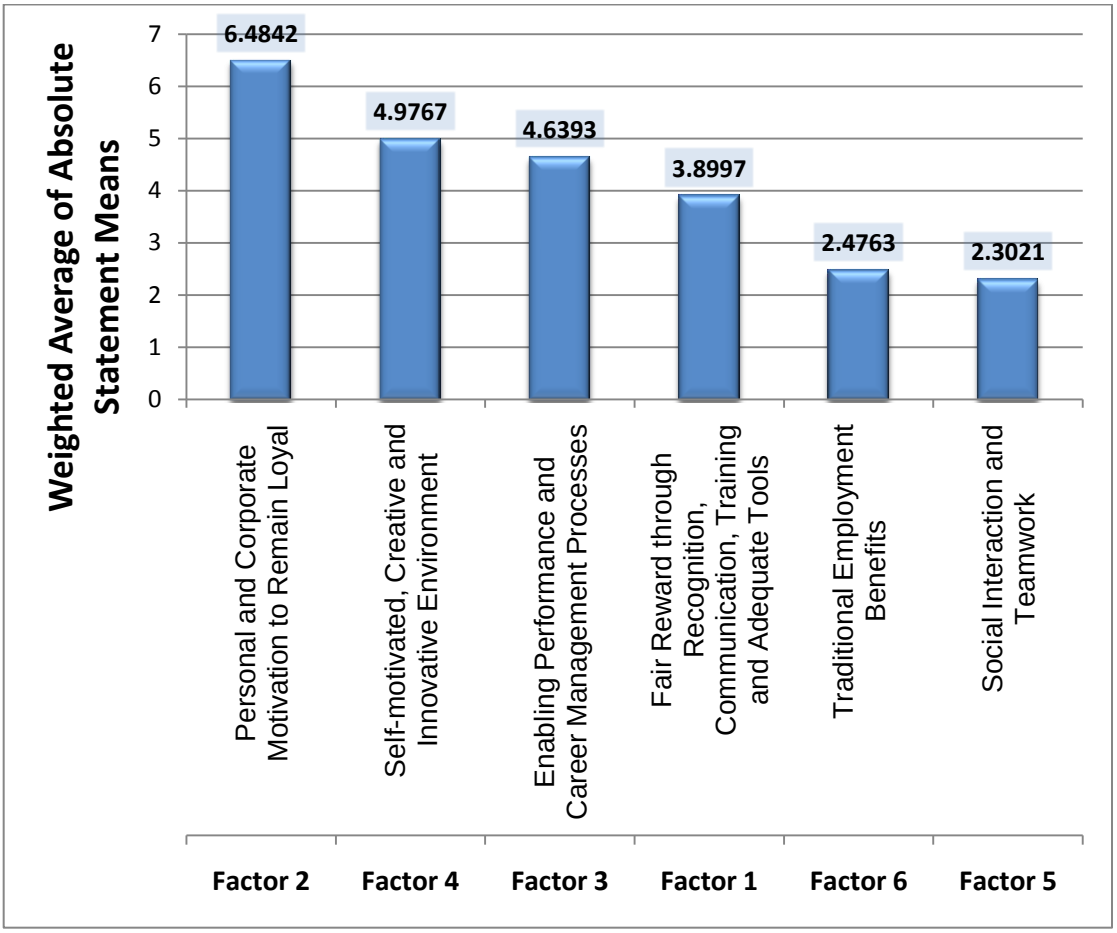


Figure 23: Relative perceived importance of the six factors (Gaylard (2004) reanalysed six-factor solution)

In order to assess the reliability of the factors, Cronbach's Alpha coefficient was calculated for each factor in the reanalysed Gaylard (2004) factor analysis. As mentioned previously, Alpha values of between 0.7 and 0.8 are satisfactory and anything above 0.8 is indicative of excellent internal consistency and reliability (Bland & Altman, 1997; Gifford & Cummings, 1999; Gliem & Gliem, 2003).

Section 4.6.2 presented the overall Cronbach's Alpha coefficient for all fifty statements for this study as 0.9596. Table 36 compares the overall Cronbach's Alpha coefficient for this study with the Cronbach's Alpha coefficient recalculated for the reanalysed Gaylard (2004) data (a value of 0.9628). The Cronbach's Alpha coefficient for the reanalysed Gaylard (2004) data is marginally higher than the overall Cronbach's Alpha coefficient for this study. Both of these values represent

a very high value for the coefficient and both therefore indicate high overall internal consistency and reliability for both studies.

Table 36: Overall Cronbach's Alpha – Gaylard (2004) comparison

Overall Cronbach's Alpha	Gaylard (2004) Overall Cronbach's Alpha
0.9596	0.9628

Cronbach's Alpha coefficient for each of the individual factors is also very satisfactory. See Table 37 for the ranked values for the six factors from the Gaylard (2004) reanalysis compared to the values obtained for the six factors in this study. These high values are indicative of the fact that in both cases, the chosen factors reasonably represent the underlying statements.

Table 37: Ranked Cronbach's Alpha for each of the six factors (six-factor solution) – Gaylard (2004) comparison

Factor	Cronbach's Alpha	Gaylard Factor	Cronbach's Alpha
Factor 1	0.9425	Factor 1	0.9328
Factor 3	0.8999	Factor 2	0.9315
Factor 2	0.8702	Factor 4	0.8758
Factor 4	0.8449	Factor 3	0.8450
Factor 6	0.7913	Factor 5	0.7828
Factor 5	0.7539	Factor 6	0.7789

Gaylard's restated Research Proposition 3 follows:

> "The variables that have the most influence on IT workers' decisions to remain with a company may be meaningfully grouped by factor analysis into the following six factors:
>
> - *Factor 1*: Equity and enablement for high performance;
> - *Factor 2*: Liberated and empowered culture;

- *Factor 3*: Effective and interactive communication channel;
- *Factor 4*: Environment rich in personal growth opportunities;
- *Factor 5*: Standard employment contract benefits; and
- *Factor 6*: Social interaction" (Gaylard, 2004, p. 128).

In reanalysing the Gaylard (2004) data, the factors did not remain identical to the original research. The factors that were common were those relating to reward, social interaction and traditional employment benefits. The reanalysed Gaylard (2004) groupings were used for comparison in this study, namely:

- *Factor 1*: Fair reward through recognition, communication, training and adequate tools;
- *Factor 2*: Personal and corporate motivation to remain loyal;
- *Factor 3*: Enabling performance and career management processes;
- *Factor 4*: Self-motivated, creative and innovative environment;
- *Factor 5*: Social Interaction and teamwork; and
- *Factor 6*: Traditional employment benefits.

All of the factors in the reanalysed Gaylard (2004) study, and the factors identified in this study correspond loosely within the following broad categories:

- Reward;
- Motivation to stay;
- Culture/environment;
- Traditional benefits;
- Teamwork and play; and
- Enabling performance.

4.6.6 *Research Proposition 3 summary*

The third research proposition posed in this study was:

The variables that have the most influence on IT professionals' decisions to remain with an organisation may be meaningfully grouped by factor analysis into the following six factors:

- *Factor 1*: Equity and enablement for high performance;
- *Factor 2*: Liberated and empowered culture;
- *Factor 3*: Effective and interactive communication channel;
- *Factor 4*: Environment rich in personal growth opportunities;
- *Factor 5*: Standard employment contract benefits; and
- *Factor 6*: Social interaction.

The factors extracted for the three-factor solution, which indicate three possible themes that underlie the turnover intentions of IT professionals, were as follows:

- *Factor 1*: Performance-related opportunity, reward and recognition;
- *Factor 2*: Corporate alignment and personal development; and
- *Factor 3*: Secure working environment with traditional benefits.

The factors extracted from the reanalysis of the Gaylard (2004) data, together with their mapping to the six-factor solution factors established in this study, and the broad categorisations found to be common in both sets of factors are summarised in Table 38.

Table 38: Summary of broad themes and corresponding factors – six-factor solution

Broad theme	Factor	Factor description	Gaylard factor	Gaylard (2004) reanalysed factor description
Reward	Factor 1	Liberating, enabling and rewarding personal work experience	Factor 1	Fair reward through recognition, communication, training and adequate tools
Motivation to stay	Factor 2	Freedom to determine personal and organisational destiny	Factor 2	Personal and corporate motivation to remain loyal
Culture/ environment	Factor 3	Inspiring, supportive, learning culture	Factor 4	Self-motivated, creative and innovative environment
Traditional benefits	Factor 4	Traditional employment provisions	Factor 6	Traditional employment benefits
Teamwork and play	Factor 5	Constructive teamwork	Factor 5	Social interaction and teamwork
Enabling performance	Factor 6	Adequate provision to enable optimal performance	Factor 3	Enabling performance and career management processes

These factors do not, however map to the original Gaylard (2004) factors, but they do map broadly to the reanalysed Gaylard (2004) factors.

4.7 Results pertaining to Research Proposition 4

A reproduction of the research proposition posed in Section 2.4.4 follows:

There is a moderately strong inverse relationship between IT professionals' level of job satisfaction and their intention to leave an organisation. In addition, there is

no relationship between an IT professional's intention to leave an organisation and each of the following demographic categories:

- Current employer;
- Race;
- Gender;
- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained; and
- Current level of expertise.

To address this proposition, each demographic variable in the questionnaire was analysed against the variable 'intention to leave' to determine the extent and significance of each individual relationship.

The demographic variables and their corresponding levels of measurement are presented in Table 39.

Table 39: Demographic variables and their corresponding level of measurement

Demographic variable	Level of measurement
Current employer	Nominal
Race	Nominal
Gender	Nominal
Age	Ordinal
Number of Employees in current organisation	Ordinal
Years of service with current organisation	Ordinal
Highest university or equivalent qualification obtained	Ordinal
Current level of expertise	Ordinal
Job satisfaction level	Ordinal

An additional nominal variable was added, which was the ‘age’ variable recoded from ordinal to nominal, called ‘age_recoded’. This recoding is given in Table 6, Section 3.7.4. This recoding enabled the comparison of the recoded age variable (nominal) to the Gaylard (2004) age variable (nominal).

4.7.1 *Nominal demographic variables*

As per Table 39, the first three variables, as well as the recoded variable are nominal:

- Current employer;
- Race;
- Gender; and
- Age_recoded.

For each of these nominal level variables, the extent of the relationship in each case to the variable ‘intention to leave’, was established as well as identifying whether the relationship was significant or not.

This was accomplished using cross-tabulations in SPSS and interpreting the output, specifically the Chi^2 test statistic and p-value. The cross-tabulation and Chi^2 tests SPSS outputs for each of the analyses are presented in Appendix M.

The hypotheses tested in each case were as follows:

- *Null hypothesis (H_0)*: There is no relationship between the variable and an IT professional’s turnover intent; and
- *Alternative hypothesis (H_1)*: There is a relationship between the variable and an IT professional’s turnover intent.

Using a level of significance of 0.05, and the Chi^2 test statistic (specifically the p-values in each case), the null hypothesis (H_0) was tested and either rejected or not.

Table 40 gives a summary of the results of the hypothesis testing for each of the four variables, as well as the final decision in each case.

Table 40: Relationship between the nominal demographic variables and 'intention to leave'

Nominal variable	Degrees of freedom	Chi^2 value	Significance probability	Decision
Current employer	33	24.976	0.841	Test invalid
Race	9	25.431	0.003	Test invalid
Gender	3	3.447	0.328	Accept H_0
Age_recoded	3	4.454	0.216	Accept H_0

From these results, it is apparent that only the 'race' nominal demographic variable could remotely have a potentially significant relationship with the variable 'intention to leave'. There is a caveat however in interpreting Chi^2 statistics - the Chi^2 test of independence requires that the expected frequency for all cells be five or higher. In practice, if the percentage of cells having an expected frequency of less than five is greater than or equal to 20 per cent then the expected frequency numbers are not large enough (Lind, Marchal, & Wathen, 2006). Out of the four nominal variables analysed, only 'gender' (see Appendix M, Table 99) and 'age_recoded' (see Appendix M, Table 101) adhere to this requirement. Both state that '0 cells (0 per cent) have expected a count less than 5'. The other two nominal variables, 'current employer' (see Appendix M, Table 91) and 'race' (see Appendix M, Table 95) have more than 20 per cent of the cells with expected counts less than five. This implies that a basic requirement needed in order to validly perform and interpret the Chi^2 test of independence is not present for these two variables and therefore any interpretation made on the basis of these analyses would be invalid for 'current employer' and 'race'.

In order to be able to use the ‘current employer’ and ‘race’ variables, these were recoded. The ‘current employer’ recoding (merging of categories) is presented in Table 41 and the ‘race’ recoding (merging of categories) is presented in Table 42.

Table 41: Recoding of current employer variable into merged categories

Recoded employer variable	Original employer variable
Discovery	Discovery Group Life
	Discovery Insure
	Discovery Invest
	Discovery Life
	PruProtect
Non-Discovery	ABSA Bank
	Investec
	Liberty Life
	Nedbank
	Other
	RMB
	Standard Bank

Having recoded the ‘current employer’ variable, there was only one cell, representing 12.5 per cent, where the expected frequency was less than five. This was acceptable as it was less than 20 per cent. The analyses for the ‘current employer recoded’ are presented in Appendix M, Table 92 (cross tabulation) and Table 93 (Chi^2 tests).

Table 42: Recoding of race variable into merged categories

Recoded race variable	Original race variable
Black	Black
Asian Or Coloured	Asian
	Coloured
White	White

Having recoded the 'race' variable, there were no remaining cells, where the expected frequency was less than five. This is the ideal scenario. The analyses for the 'race recoded' are presented in Appendix M, Table 96 (cross tabulation) and Table 97 (Chi^2 tests).

Table 43 contains the updated summary of the results of the hypothesis testing for each of the four variables, as well as the final decision in each case.

Table 43: Recoded relationship between the nominal demographic variables and 'Intention to leave'

Nominal variable	Degrees of freedom	Chi^2 value	Significance probability	Decision
Current_employer_recoded	3	0.827	0.328	Accept H_0
Race_recoded	6	17.398	0.008	Reject H_0
Gender	3	3.447	0.328	Accept H_0
Age_recoded	3	4.454	0.216	Accept H_0

Only the recoded 'race' variable appeared to indicate a relationship to 'intention to leave'.

4.7.2 *Ordinal demographic variables*

As per Table 39, the last six demographic variables are ordinal:

- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained;
- Current level of expertise; and
- Job satisfaction level.

For each of these ordinal level variables, the same hypotheses (at a level of significance of 0.05) were used to test and determine the extent of the relationship of each variable to the variable 'intention to leave'. First, the text values of the variables were recoded to numeric values, after which Spearman's rank order correlation was calculated using SPSS. The recoding tables and Spearman's rank order correlation SPSS outputs for each of the analyses are presented in Appendix N. In each case, the Spearman's rank order correlation value indicated whether there was a correlation between the demographic variable in question and the intention to leave or not and the strength of this correlation. The p-value indicated whether the correlation was statistically significant or not.

Table 44: Relationship between the ordinal demographic variables and 'intention to leave'

Ordinal variable	Spearman's rank order correlation	Significance (2-tailed)	Decision
Age	- 0.066	0.287	Accept H_0
Number of employees	- 0.020	0.747	Accept H_0
Years of service	0.085	0.173	Accept H_0
Highest qualification obtained	- 0.005	0.932	Accept H_0
Level of expertise	- 0.022	0.719	Accept H_0
Job satisfaction level	- 0.369	0.000	Reject H_0

'Job satisfaction level' showed a significant correlation at the 0.01 level (2-tailed), and was found to be the only ordinal demographic variable significantly related to 'intention to leave'. By examining the Spearman's rank order correlation for this variable, it was apparent that 'job satisfaction level' is moderately negatively correlated to the variable 'intention to leave'.

4.7.3 *Comparison to the Gaylard results*

Gaylard's restated Research Proposition 4 follows:.

> "There is a moderately-strong inverse relationship between IT workers' level of job satisfaction and their intention to leave an organisation. In addition, there is no relationship between an IT worker's intention to leave an organisation and each of the following:
>
> - Country of residence; and
> - Age" (Gaylard, 2004, p. 129).

This study analysed a number of demographic variables not present in the Gaylard (2004) study. Of the three variables investigated by Gaylard (2004), only

two were comparable, as the ‘country of residence’ variable was not applicable in this study. As with the Gaylard (2004) study, this study found no relationship between an IT professional’s age and their intention to leave their organisation. In line with the Gaylard (2004) study, this study also found a moderately strong inverse relationship between IT professional’s level of job satisfaction and their intention to leave their organisation.

4.7.4 *Research Proposition 4 summary*

The fourth research proposition posed in this study was:

There is a moderately strong inverse relationship between IT professionals’ level of job satisfaction and their intention to leave an organisation. In addition, there is no relationship between an IT professional’s intention to leave an organisation and each of the following demographic categories:

- Current employer;
- Race;
- Gender;
- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained; and
- Current level of expertise.

The response to Research Proposition 4 of this study was that there were two demographic variables found to have significant relationships to an IT professional’s turnover intent. Dependence was found between an IT professional’s race and their intention to leave; in addition, a moderately strong inverse relationship was found between an IT professional’s level of job satisfaction and their intention to leave their organisation.

4.8 Results pertaining to Research Proposition 5

The research proposition posed in Section 2.4.5 follows:

The sample of IT professionals found the biggest 'gaps' in the provision of retention variables to fall into the following five themes:

- Performance-related financial reward;
- Job security;
- Training and opportunities for personal growth;
- Tools to enable high performance; and
- Clear communication between management and employees.

This question was answered using the data collections for both questions from Section 2 of the questionnaire: 'how important is this variable in my decision to remain with my current company?' and 'to what degree is this variable satisfied at my current company?' Both sets of data were subjected to Stacey's distribution-fitting algorithmic approach (2005) in Microsoft Excel which resulted in item means and standard deviations for each of the fifty statements for each question (the full list of ranked variables according to mean for the first set of statements is presented in Appendix C, Table 62; and the full list of ranked variables according to mean for the second set of statements is presented in Appendix O, Table 114). The Chi^2 statistic (p-value) was also calculated as it is suggested (Stacey, 2005) that this statistic is the most appropriate for optimising the parameters for the model. Stacey states the following regarding the fit of the model to the data:

> "if the value of Chi^2 is not significant, then the model (distributions and thresholds) can be deemed to adequately fit the survey data" (Stacey, 2005, p. 7).

The Chi^2 p-value for each question was calculated (see Table 45 below) and both were not significant, thereby indicating that model adequately fitted the survey data in each case.

Table 45: Chi^2 p-values for both questions

Chi^2 p-value – 'importance' question	Chi^2 p-value – 'satisfied' question
0.9887	0.6907

The item means in each case were labelled:

- 'How important is this variable in my decision to remain with my current company?' – labelled [A];
- 'To what degree is this variable satisfied at my current company?' – labelled [B]; and
- [A] and [B] denoted the two datasets which were used in determining the largest and smallest differences between what IT professionals find to be important in their personal organisational commitment, and the retention practices that their current employer employs.

Using the means of each of the two questions as coordinates ([A], [B]), each statement was plotted graphically (see Figure 24), with the x-axis representing the importance of the statement in the IT professional's turnover intent [A], and the y-axis representing the degree to which the statement is satisfied in the IT professional's current organisation [B].

This graphical representation gave an indication of four potential categories, based on the four quadrants of the graph, of differences in attitudes towards the two questions.

The four categories were identified as follows:

- High importance, highly satisfied;
- High importance, low satisfaction;
- Low importance, low satisfaction; and
- Low importance, highly satisfied.

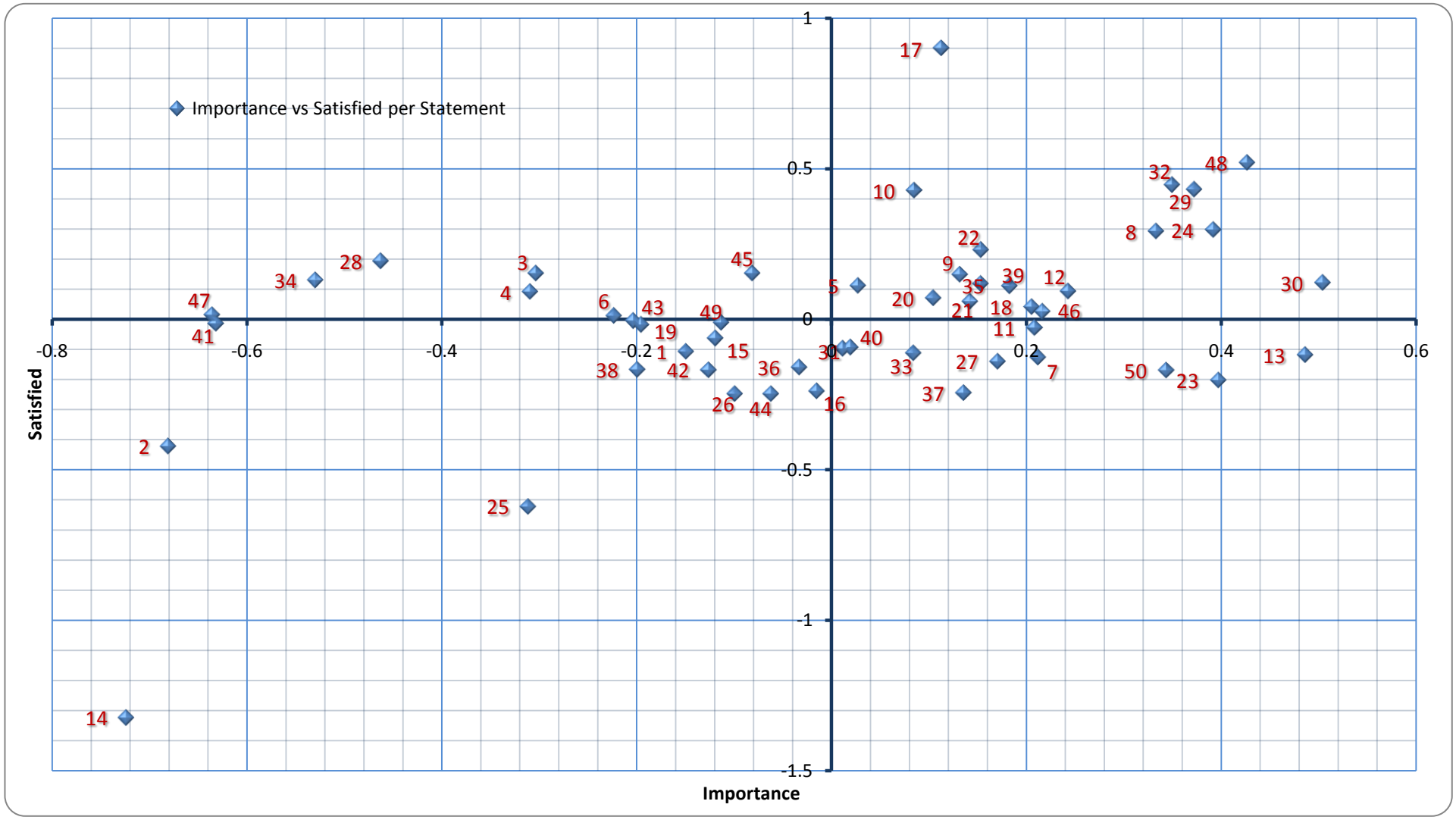


Figure 24: Importance vs satisfied (means) per statement

These categories and brief descriptions were diagrammed in Section 3.7.5 ‘Analysis of Research Proposition 5’, in Figure 10, and represented the method used for interpreting the differences or gaps identified between the attitudes to the two questions for each statement.

In order to determine the biggest and smallest ‘gaps’ in the respondent’s attitudes towards each of the two questions for each of the 50 statements, the means were subtracted for each statement using the following formula:

Gap = [A] – [B]

The ideal outcome for any organisation would be that the statements are perfectly satisfied/aligned in accordance with their importance to the IT professionals working in that organisation. This would be represented by all of the statements lying along the diagonal (the green line in Figure 10, in Section 3.7.5 ‘Analysis of Research Proposition 5’), with means for ‘importance’ equalling the means for ‘satisfied’ for each statement, thereby resulting in a ‘gap’ of zero in each case.

The statements that were plotted in each quadrant/category were interpreted differently, based on the meaning inherent in each quadrant. In each case, positive ‘gaps’ indicated a higher value for the ‘importance’ question, and negative ‘gaps’ indicated a higher value for the ‘satisfied’ question. The biggest and smallest ‘gaps’ were also identified per category, by ranking the list of statements in the category based on the ‘gap’. The ranked list of statements for the difference in means (per category), between the importance of each variable in the respondents remaining with the current organisation and whether this variable was currently satisfied in their organisation, is included in Appendix Q. Each category is tabled separately in Appendix Q as follows:

- High importance, highly satisfied - Table 117;
- High importance, low satisfaction - Table 118;
- Low importance, low satisfaction - Table 119; and
- Low importance, highly satisfied - Table 120.

It should be noted that none of the statements in the category ‘high importance, low satisfaction’ contain a positive mean for the ‘satisfied’ question, and all of the statements do have a positive mean for the ‘importance’ question. The sample are therefore generally of the opinion that none of these statements are satisfied in their current organisation, while they are all deemed to be important in the turnover decision. All of the statements in this category should therefore be looked at seriously in attempts to retain IT professionals:

- Having a competitive market-related remuneration package;
- Being financially rewarded in accordance with my contribution and performance;
- Being fairly rewarded relative to other employees, based on my experience, qualifications and performance;
- Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due;
- Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals;
- Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways;
- Working for a company which identifies and looks after its high performers;
- Having my financial package structured so as to minimise my tax obligation;
- Having fun on the job; and
- Receiving medical aid benefits.

The biggest ‘gaps’, taken from all of the categories, are represented by the following statements:

- Having a good balance between my work and home life (high importance, highly satisfied);
- Having a good working relationship with my colleagues (high importance, highly satisfied);

- Being part of a pension or provident scheme (high importance, highly satisfied);
- Having a competitive market-related remuneration package (high importance, low satisfaction);
- Being financially rewarded in accordance with my contribution and performance (high importance, low satisfaction);
- Being fairly rewarded relative to other employees, based on my experience, qualifications and performance (high importance, low satisfaction);
- Being given share options in the company (low importance, low satisfaction);
- Having opportunities to obtain global exposure and experience (low importance, low satisfaction);
- Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements (low importance, low satisfaction);
- Working in an ever-changing environment (low importance, low satisfaction);
- Having a close colleague or good friend at work (low importance, highly satisfied);
- Working in teams (low importance, highly satisfied); and
- Having the freedom and time to interact socially with other employees at work (low importance, highly satisfied);

These statements seem to cluster into the following six themes for the largest ‘gaps’:

- Fair and commensurate reward;
- Balance;
- Satisfactory teamwork;
- Social interaction;
- Global opportunity; and
- Constant change.

The smallest ‘gaps’, taken from all of the categories are represented by the following:

- Having a competent manager (high importance, highly satisfied);
- Having an empowering and constructive working relationship with my direct manager (high importance, highly satisfied);
- Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation (high importance, highly satisfied);
- Working in an environment which allows me a high level of autonomy and freedom to get the work done (high importance, highly satisfied);
- Having my financial package structured so as to minimise my tax obligation (High importance, low satisfaction);
- Having fun on the job (high importance, low satisfaction);
- Receiving medical aid benefits (high importance, low satisfaction);
- Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities (low importance, low satisfaction);
- Having the ability to change careers within the same organisation (low importance, low satisfaction);
- Having a manager who really cares for me as a human being (low importance, low satisfaction);
- Working in an organisation which has clear and sound governance over its core activities (low importance, highly satisfied); and
- Having a clearly articulated corporate vision, goals and plans on how to achieve these goals (low importance, highly satisfied).

These statements seem to cluster into the following five groupings for the smallest ‘gaps’:

- Mutually respectful relationship with direct management;
- Control of personal destiny;
- Optimised package and benefits;

- Clear communication of company's goals and how they map to personal goals; and
- Fun.

4.8.1 *Comparison to the Gaylard results*

Due to the fact that this was a comparison study of the research performed by Gaylard (2004), and that the original study used a correspondence analysis rescaling method on the data prior to determining the descriptive statistics such as means and standard deviations, the original data was reanalysed using the distribution-fitting algorithmic approach (Stacey, 2005). This was done in order to generate the required statement means to allow for accurate, appropriate comparisons. (The full list of ranked variables according to mean for the first set of statements is presented in Appendix C, Table 63; and the full list of ranked variables according to mean for the second set of statements is presented in Appendix O, Table 115)

The Chi^2 statistic (p-value) was also calculated as it is suggested (Stacey, 2005) that this statistic is the most appropriate for optimising the parameters for the model. The Chi^2 p-value for each question for the reanalysed Gaylard (2004) data was calculated (see Table 46) and both were not significant, thereby indicating that model adequately fitted the survey data in each case.

Table 46: Chi^2 p-values for both questions for the reanalysed Gaylard (2004) data

Chi^2 p-value – 'importance' question	Chi^2 p-value – 'satisfied' question
1.0000	0.4463

The same formula and method as used in the current study to determine the 'gap' in each case was applied to the reanalysed Gaylard (2004) data. Using the means of each of the two questions as coordinates ([A], [B]), each statement was plotted graphically, with the x-axis representing the importance of the statement in the IT professional's turnover intent [A], and the y-axis representing the degree to which

the statement is satisfied in the IT professional's current organisation [B]. The graphical representation is shown in Appendix Q, Figure 27.

The statements were then ranked within the four categories identified in Section 4.8, using the same technique as aforementioned. The ranked list of statements for the difference in means (per category), in terms of the reanalysed Gaylard (2004) data, is presented in Appendix Q. Each category is tabled separately in Appendix Q:

- High importance, highly satisfied - Table 121;
- High importance, low satisfaction - Table 122;
- Low importance, low satisfaction - Table 123; and
- Low importance, highly satisfied - Table 124.

It should be noted that none of the statements in the category 'high importance, low satisfaction' contain a positive mean for the 'satisfied' question, and all of the statements have a positive mean for the 'importance' question. Therefore the sample are generally of the opinion that none of these statements are satisfied in their current organisation, while they are all deemed to be important in the turnover decision. All of the following statements in this category should therefore be looked at seriously in attempts to retain IT professionals:

- Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals;
- Having a sense of security that my job is not threatened and is mine as long as I'd like it;
- Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.);
- Being fairly rewarded relative to other employees, based on my experience, qualifications and performance;
- Being financially rewarded in accordance with my contribution and performance;
- Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training;

- Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways;
- Working for a company which identifies and looks after its high performers;
- Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due;
- Having a job which allows me to be creative and innovative; and
- Working in a culture of excellence and continuous improvement.

The biggest ‘gaps’, taken from all of the categories are represented by the following statements:

- Having a competitive market-related remuneration package (high importance, highly satisfied);
- Having a good balance between my work and home life (high importance, highly satisfied);
- Having a good working relationship with my colleagues (high importance, highly satisfied);
- Being part of a pension or provident scheme (high importance, highly satisfied);
- Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals (high importance, low satisfaction);
- Having a sense of security that my job is not threatened and is mine as long as I'd like it (high importance, low satisfaction);
- Having my financial package structured so as to minimise my tax obligation (low importance, low satisfaction);
- Having the freedom and time to interact socially with other employees at work (low importance, low satisfaction);
- Working in an ever-changing environment (low importance, low satisfaction);
- Being given share options in the company (low importance, low satisfaction);

- Having a close colleague or good friend at work (low importance, low satisfaction);
- Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.) (low importance, highly satisfied); and
- Working in teams (low importance, highly satisfied).

These statements seem to cluster into the following six groupings for the largest ‘gaps’:

- Balance;
- Personally enriching career growth;
- Structured remuneration;
- Social interaction opportunities and close relationships;
- Traditional benefits; and
- Job and personal security.

The smallest ‘gaps’, taken from all of the categories are represented by the following:

- Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation (high importance, highly satisfied);
- Working in an environment which allows me a high level of autonomy and freedom to get the work done (high importance, highly satisfied);
- Having a sense of loyalty to remain with and continue to serve the organisation (high importance, highly satisfied);
- Having fun on the job (high importance, highly satisfied);
- Having a job which allows me to be creative and innovative (high importance, low satisfaction);
- Working in a culture of excellence and continuous improvement (high importance, low satisfaction);
- Having a clearly articulated corporate vision, goals and plans on how to achieve these goals (low importance, low satisfaction);
- Having the ability to change careers within the same organisation (low importance, low satisfaction);

- Being able to influence the kind of work that gets assigned to me (low importance, low satisfaction);
- Receiving clear and frequent communications on strategy, goals and plans (low importance, low satisfaction); and
- [There were no smallest gaps in the category low importance, highly satisfied‘’.]

These statements seem to cluster into the following four themes:

- Personal freedom in a creative, excellence-driven culture;
- Clear communication of company's goals and how they map to personal goals;
- Loyalty without feeling bound; and
- Fun.

Gaylard’s restated Research Proposition 5 follows:

> “The sample of IT workers found the biggest gaps in the provision of retention variables to fall into the following five themes:
>
> - Performance-related financial reward;
> - Job security;
> - Training and opportunities for personal growth;
> - Tools to enable high performance; and
> - Clear communication between management and employees” (Gaylard, 2004, p. 131).

The findings in terms of the biggest ‘gaps’ in the reanalysed Gaylard data do not map completely to the original Gaylard (2004) findings restated prior. There were three common themes between the original analysis and the reanalysis of the Gaylard (2004) data:

- Reward/remuneration;
- Job security; and
- Career growth.

The reanalysis resulted in three biggest ‘gap’ themes that were not evident in the original analysis:

- Balance;
- Social interaction opportunities and close relationships; and
- Traditional benefits.

In mapping this current research to the reanalysed research based on the Gaylard (2004) data, three themes for the biggest ‘gaps’ were found to be common:

- Balance;
- Fair and commensurate reward/structured remuneration; and
- Social interaction/social interaction opportunities and close relationships.

Gaylard’s (2004) research proposition did not take into account the smallest ‘gaps’; however, this research was concerned with these differences. In mapping this current research to the reanalysed research based on the Gaylard (2004) data, two themes for the smallest ‘gaps’ were found to be common:

- Clear communication of company's goals and how they map to personal goals; and
- Fun.

4.8.2 *Research Proposition 5 summary*

The fifth research proposition posed in this study was:

The sample of IT professionals found the biggest ‘gaps’ in the provision of retention variables to fall into the following five themes:

- Performance-related financial reward;
- Job security;
- Training and opportunities for personal growth;
- Tools to enable high performance; and
- Clear communication between management and employees.

The largest differences between what IT professionals find to be important in their personal organisational commitment, and the retention practices that their current employer employs, have been grouped into the following themes:

- Fair and commensurate reward;
- Balance;
- Satisfactory teamwork;
- Social interaction;
- Global opportunity; and
- Constant change.

In mapping this current research to the reanalysed research based on the Gaylard (2004) data, three themes for the biggest ‘gaps’ were found to be common:

- Balance;
- Fair and commensurate reward/structured remuneration; and
- Social interaction/social interaction opportunities and close relationships.

The smallest differences between what IT professionals find to be important in their personal organisational commitment, and the retention practices that their current employer employs, have been grouped into the following themes:

- Mutually respectful relationship with direct management;
- Control of personal destiny;
- Optimised package and benefits;
- Clear communication of company's goals and how they map to personal goals; and
- Fun.

In mapping this current research to the reanalysed research based on the Gaylard (2004) data, two themes for the smallest ‘gaps’ were found to be common:

- Clear communication of company's goals and how they map to personal goals; and
- Fun.

4.9 Summary of the results

4.9.1 *Research Proposition 1*

The most important retention themes that influence an IT professional's decision to remain with an organisation are:

- Work/home balance;
- Well-developed interdependence with other colleagues;
- Clear and open communication channels with direct management;
- Performance-related financial reward; and
- A performance-enabling environment.

The following themes are those most likely to cause IT professionals to consider leaving their current organisation, if they are not present; these are the same high-level themes identified in the reanalysed Gaylard (2004) study:

- Sufficient, flexible down-time;
- Commensurate remuneration;
- Accessibility to appropriate tools; and
- Open, respectful relationship with direct management.

The proposition is therefore upheld.

4.9.2 *Research Proposition 2*

The traditional retention variables such as those listed will have little influence on an IT professional's decision to remain with an organisation:

- Job security;
- Loyalty;
- Share options;
- Pension/provident scheme; and
- Health care benefits.

The following themes are those least likely to cause IT professionals to consider leaving their current organisation:

- Job environment and requirements;
- Social interaction; and
- Project and teamwork.

When considering the least important variables affecting the turnover intentions of IT professionals, the two lists of bottom 10 statements produced firstly through the original Gaylard research (2004, pp. 88-89), and secondly through the reanalysed Gaylard (2004) data, only have eight of the 10 statements in common. This indicates that the two different methods utilised in determining the means of the statements resulted in noticeably different results in this case.

Only two of the logical groupings identified in this study were also present in the least important themes identified in the reanalysis of the Gaylard data and the Gaylard (2004) study. The additional theme identified by Gaylard (2004) as one of the least important to IT professionals in their decision to remain with a company, was that of 'Traditional retention benefits' (Gaylard, 2004, p. 90). Gaylard's (2004) second retention proposition specifically stated that traditional retention variables were no longer important to IT professionals. From the evidence found in the results of the analysis performed in addressing this research proposition, this could not be confirmed, and therefore this proposition is not upheld.

4.9.3 *Research Proposition 3*

The variables that have the most influence on IT professionals' decisions to remain with an organisation may be meaningfully grouped by factor analysis into the following six factors:

- *Factor 1*: Equity and enablement for high performance;
- *Factor 2*: Liberated and empowered culture;
- *Factor 3*: Effective and interactive communication channel;
- *Factor 4*: Environment rich in personal growth opportunities;

- *Factor 5*: Standard employment contract benefits; and
- *Factor 6*: Social interaction.

If the validity of the proposition were to be based on the original factors identified by Gaylard (2004), then the proposition would not be upheld, because the factors do not correspond.

The factors extracted for the three-factor solution, which indicate three possible themes that underlie the turnover intentions of IT professionals, were as follows:

- *Factor 1*: Performance-related opportunity, reward and recognition;
- *Factor 2*: Corporate alignment and personal development; and
- *Factor 3*: Secure working environment with traditional benefits.

The factors extracted from the reanalysis of the Gaylard (2004) data, together with their mapping to the six-factor solution factors established in this study, and the broad categorisations found to be common in both sets of factors are shown again in Table 47.

Table 47: Summary of broad themes and corresponding factors

Broad theme	Factor	Factor description	Gaylard Factor	Gaylard (2004) reanalysed factor description
Reward	Factor 1	Liberating, enabling and rewarding personal work experience	Factor 1	Fair reward through recognition, communication, training and adequate tools
Motivation to stay	Factor 2	Freedom to determine personal and organisational destiny	Factor 2	Personal and corporate motivation to remain loyal
Culture/ Environment	Factor 3	Inspiring, supportive, learning culture	Factor 4	Self-motivated, creative and innovative environment
Traditional benefits	Factor 4	Traditional employment provisions	Factor 6	Traditional employment benefits
Teamwork and play	Factor 5	Constructive teamwork	Factor 5	Social interaction and teamwork
Enabling performance	Factor 6	Adequate provision to enable optimal performance	Factor 3	Enabling performance and career management processes

Restating the original Gaylard (2004) Research Proposition 3, to align with the reanalysed data would result in the following restated proposition:

The variables that have the most influence on IT professionals' decisions to remain with an organisation may be meaningfully grouped by factor analysis into the following six factors:

- *Factor 1*: Fair reward through recognition, communication, training and adequate tools;
- *Factor 2*: Personal and corporate motivation to remain loyal;
- *Factor 3*: Enabling performance and career management processes;
- *Factor 4*: Self-motivated, creative and innovative environment;
- *Factor 5*: Social interaction and teamwork; and
- *Factor 6*: Traditional employment benefits.

Based on the factors resulting from the reanalysed Gaylard (2004) data, and in comparing these to the factors emanating from the current study, the research proposition is upheld.

4.9.4 *Research Proposition 4*

There is a moderately strong inverse relationship between IT professionals' level of job satisfaction and their intention to leave an organisation. In addition, there is no relationship between an IT professional's intention to leave an organisation and each of the following demographic categories:

- Current employer;
- Race;
- Gender;
- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained; and
- Current level of expertise.

The response to Research Proposition 4 of this study is that there were two demographic variables found to have significant relationships to an IT professional's turnover intent. Dependence was found between an IT professional's race and their intention to leave; in addition, a moderately strong inverse relationship was found between an IT professional's level of job satisfaction and their intention to leave their organisation. The proposition is therefore partially upheld.

4.9.5 *Research Proposition 5*

The sample of IT professionals found the biggest 'gaps' in the provision of retention variables to fall into the following five themes:

- Performance-related financial reward;

- Job security;
- Training and opportunities for personal growth;
- Tools to enable high performance; and
- Clear communication between management and employees.

The largest differences between what IT professionals find to be important in their personal organisational commitment, and the retention practices that their current employer employs, have been grouped into the following themes:

- Fair and commensurate reward;
- Balance;
- Satisfactory teamwork;
- Social interaction;
- Global opportunity; and
- Constant change.

In mapping this current research to the reanalysed research based on the Gaylard (2004) data, three themes for the biggest ‘gaps’ were found to be common:

- Balance;
- Fair and commensurate reward/structured remuneration; and
- Social interaction/social interaction opportunities and close relationships.

The smallest differences between what IT professionals find to be important in their personal organisational commitment, and the retention practices that their current employer employs, have been grouped into the following themes:

- Mutually respectful relationship with direct management;
- Control of personal destiny;
- Optimised package and benefits;
- Clear communication of company's goals and how they map to personal goals; and

- Fun.

In mapping this current research to the reanalysed research based on the Gaylard (2004) data, two themes for the smallest ‘gaps’ were found to be common:

- Clear communication of company's goals and how they map to personal goals; and
- Fun.

This chapter concerned what was found in terms of the results. The following chapter details the ‘why’ – an explanation and interpretation of the results found in this chapter.

CHAPTER 5: DISCUSSION OF THE RESULTS

5.1 Introduction

The previous chapter concerned ‘what’ was found in terms of the results. This chapter details ‘why’ the results presented in Chapter 4 were what they were; this chapter therefore offers explanations as to why the results came about.

This chapter starts with a section on the demographic profile of the respondents to the survey. Following this, each of the five research propositions is discussed relating to the analysis presented in Chapter 4. The results of this research are compared to similar studies, specifically the Gaylard (2004) study, of which this is a comparison study, and where appropriate, any differences and similarities highlighted. The results are also discussed in relation to the literature review presented in Chapter 2.

The chapter closes with a short conclusion synthesising the discussions of each of the sections presented in this chapter.

5.2 Demographic profile of respondents

A direct and complete comparison of the demographic profile of respondents to the Gaylard (2004) study was not appropriate because the demographic variables differed between the two studies. Only the Age, Job satisfaction and Intent to leave variables were included in both studies. No country distribution demographic information was requested in this study, as all of the respondents were based in South Africa. The discussions that follow on the results of the demographic analysis take into account recent data on the demographic make-up of IT professionals, as well as compare the results to similar historic and current studies.

5.2.1 *Current employer*

The majority of the responses came from the financial services companies in the Discovery holdings group of companies, and that therefore the inferences made are particularly applicable to this group.

5.2.2 *Race*

The 50 to 25 per cent split between white and black respondents in the current study is possibly indicative of the current broad-based black economic empowerment (B-BBEE) and employment equity policies enforced at the majority of the large organisations in South Africa (Wöcke & Heymann, 2012; Wöcke & Sutherland, 2008). These include many of the financial services companies, as well as the increasing number of black employees graduating and entering the job market (Harris, 2012). The knowledge worker survey undertaken by Kinnear (1999) 13 years ago indicates the progress made in this regard; from 89 to four per cent white to black respondents split at that time.

5.2.3 *Gender*

This current study indicates a 36 to 64 per cent split in respondents for females to males. While the IT industry has always been a male dominated industry (Harris, 2012; Mawson, 2012), these numbers are still extremely disappointing, considering the current gender statistic, based on the 2011 population census in South Africa, which indicates that there are more females (52 per cent) than males (48 per cent) in the population (Statistics South Africa, 2012), as well as the recent drive towards gender equality in South Africa. It does however show a slight improvement in the numbers of females in the knowledge worker space over the last thirteen years, as the gender split for knowledge workers in the Kinnear study (1999) was 27 to 73 per cent females to males. The numbers found in this study are also slightly better than the most recent South African IT professional's survey, the 2011 JCSE ICT skills survey (Schofield, 2011), which indicated a 21 to 79 per cent female to male split in respondents to that survey.

5.2.4 *Age*

This study shows that the majority of the respondents (52 per cent) were in the group between 31 and 40 years of age. The category with the next largest number of respondents were those between the ages of 18 and 30 (32 per cent) – these could be considered the new employees in the field of IT, and comprise the age category referred to as ‘generation Y’ or ‘millennials’. In the Kinnear (1999) research conducted 13 years ago, the majority of knowledge worker respondents fell into the 20 to 29 year age group. While the ‘age’ variable is not directly comparable to the Gaylard (2004) study, due to a number of categories being presented in this research, while the original research allowed for only two options, a comparison is still possible. The comparison can be drawn between the two sets of responses, by using the current study’s ‘18 to 30’ year age band and comparing this to the original research’s ‘under 30 years of age’ category and then combining the current study’s other three categories, namely ‘31 to 40’, ‘41 to 50’ and ‘more than 50’ years, in order to compare with the original study’s ‘30 or more years of age’. Table 48 indicates the percentage respondents in each of these categories, the mapping of categories, as well as the ultimate, comparable percentages for the mapped categories.

Table 48: Age mapping to the Gaylard study (2004)

CURRENT STUDY				GAYLARD STUDY (2004)	
Age groups for current study	**%'s for current study**	**Mapping to Gaylard age groups**	**% mapping to Gaylard groups**	**Age groups for Gaylard study**	**%'s for Gaylard study**
18-30	32.05 %	Under 30 years of age	32.05 %	Under 30 years of age	19.75 %
31-40	51.74 %	30 or more years of age	67.95 %	30 or more years of age	80.25 %
41-50	12.74 %	30 or more years of age			
>50	3.47 %	30 or more years of age			

From Table 48 it is apparent that the number of respondents in this study, in the 'under 30 years of age' category (32 per cent), is more than those in the comparable Gaylard (2004) category (20 per cent). This would seem to indicate that the number of entrants into the IT field has increased between 2004 and 2012 when this study took place. This may be a false indication though, as all other indications are of a drop in the number of entrants into the IT profession.

It is concerning that the majority of the IT professionals in this study fall into a relatively 'older' category. While a direct comparison to the latest demographic results from the JCSE ICT skills survey in 2011 (Schofield, 2011) is not possible as the categories differ, a broad comparison can be made to the 74 per cent of respondents in that survey in the age group of 26 to 45 years. This statistic is also indicative of the aging of the group of IT professionals. This aging is possibly an indication of the lack of graduates coming through in the IT field, also alluded to by (Harris, 2012; ITWeb, 2008; Luftman, 2008; Schofield, 2011; Tapia & Kvasny, 2004) in their concern around the global lack of IT resources.

5.2.5 *Number of employees in current organisation*

The overall majority of respondents work in organisations employing a total of more than 1000 employees (80 per cent), and the second highest number of respondents, though a relatively insignificant number (13 per cent), work for very small organisations of between 100 and 500 employees. This may be due to the fact that financial services organisations are either very large entities, such as the larger South African banks and some of the older, established long-term insurance companies, or smaller, targeted, possibly much younger organisations with few employees but nevertheless substantial ICT resource requirements. The 2011 JCSE ICT skills survey (Schofield, 2011) mirrors this trend in its survey results of all ICT professionals (not only those in the financial services sector), with the majority of respondents working in organisations of over 1000 employees.

5.2.6 *Years of service with current organisation*

Almost half of the respondents (47 per cent) have been with their current organisation for between one and five years. According to the JCSE ICT skills survey results (Schofield, 2011), 50 per cent of the respondents to the skills survey have worked for their current employer for between one and five years, which indicates a very similar result to this study. While 50 per cent have been with their current organisation for only one to five years, 57 per cent have been in the industry for more than 10 years (Schofield, 2011), which could indicate the more frequent job-hopping among IT professionals. This is also a good indication of the health of the IT field in South Africa, where a relatively high percentage of IT professionals feel free to change employers despite prevailing negative global economic conditions. The 13 per cent of respondents that have only been with their employer for a year or less may be due to the freedom with which IT professionals change jobs and may have an element of correlation to the lack of resources entering the IT field.

5.2.7 *Highest university or equivalent qualification obtained*

The vast majority of the respondents to this survey (84 per cent) have some form of tertiary qualification, be it a university, technikon or third party diploma qualification. These high levels of educational qualifications present in the sample could be as a result of the strict hiring policies in large organisations, such as those in the financial services sector. The majority of respondents (64 per cent) responded to the ICT skills survey (Schofield, 2011) indicating a tertiary qualification (which included bachelors, honours, masters or doctorate qualifications), which may be an indication of the technical skills requirement across the board in South Africa, and not just in the large financial institutions. This may present a significant barrier to entry into the IT field, which may also be a contributing factor to the reason so few school-leavers study in an IT-related field. The Kinnear knowledge worker study in 1999 identified 77 per cent of respondents as having university qualifications (Kinnear, 1999), which shows there has been a very slight progression towards the requirement for higher qualifications in the last decade or so.

5.2.8 *Current level of expertise*

The majority of respondents to this survey categorised themselves as ‘seasoned’ (53 per cent), which is consistent with the majority of respondents being with their current organisation for one to five years. This period of tenure is a sufficient amount of time to come to grips with the technologies and processes in use at an organisation, which could lead to an IT professional feeling comfortable and confident in their environment. This is consistent with the conclusions from the JCSE skills survey (Schofield, 2011) that there are few new entrants into the ICT skills market. Very few respondents categorised themselves as ‘entry level’. This could be because of very few new graduates entering the IT job market, resulting in a skills shortage of new recruits, or alternatively could be indicative of a certain arrogance associated with IT professionals when it comes to their skills. The skills shortage has also been discussed in Section 5.2.4 pertaining to the ‘age’ demographic variable.

5.2.9 *Job satisfaction level*

The majority of respondents were reasonably happy with their current employment; 54 per cent of respondents indicated a medium level of job satisfaction. Only 10 per cent of respondents indicated a low level of job satisfaction. The large numbers of respondents that are either moderately satisfied (54 per cent) or highly satisfied (36 per cent) with their current job may be a secondary effect of the global economic crisis. The levels of job satisfaction reported in this study are almost exactly the same as those reported in the Gaylard (2004) study in 2004. The job satisfaction levels among IT professionals would therefore appear to have remained consistent over the past eight years.

5.2.10 *Intention to leave*

The majority of respondents indicated that they did not intend to leave their current jobs in the foreseeable future (54 per cent). However, there are a large number (34 per cent) of respondents who would look to move within the next two years; 19 per cent of these would consider moving within one to two years, and 15 per cent would consider moving within the next year. A possible explanation for these numbers could be that many of the older (30 years and up) and tenured employees would not consider moving, as they are possibly set in their positions with their current employer and have clear organisational growth possibilities. The reason for over a quarter of the respondents indicating an intention to leave within the next two years may be explained by the propensity for especially new employees in the IT field to move around frequently. Much of this movement happens at the beginning of their careers, as well as the changes to the psychological contract to be more career focused and not employer focused (Herriot, et al., 1997).

The relationship between intention to leave and the rest of the demographic variables is explored in further detail in Research Proposition 4, the discussion of which is presented in 5.6.

5.2.11 *Profile of the representative respondent*

The demographic information demonstrates the following profile of the typical, representative IT professional reflected in this study:

He is a 35 year old white male working as an IT professional in a large financial services organisation of 1000 employees or more, with between one and five years of IT experience. He has the equivalent of a bachelor's degree or diploma, considers himself a seasoned professional, is moderately satisfied with his current job and has no intention to leave his current organisation in the foreseeable future.

5.3 Discussion pertaining to Research Proposition 1

One of the primary objectives of this research was to determine the most important areas that IT professionals considered essential to their remaining with an organisation. The first research proposition, based on the results of the original Gaylard (2004) study, therefore stated the following: The most important retention themes that influence an IT professional's decision to remain with an organisation are:

- Work/home balance;
- Well-developed interdependence with other colleagues;
- Clear and open communication channels with direct management;
- Performance-related financial reward; and
- A performance-enabling environment.

In reanalysing the Gaylard (2004) data, all of the most important (top 10) variables from the original study were still present in the top 10 most important variables after the reanalysis. The research proposition therefore remained unchanged despite reanalysis.

The following themes were identified in the current study as those most likely to cause IT professionals to consider leaving their current organisation if they were

not present; all of these high-level themes mapped to the concepts identified in the Gaylard (2004) study (both original and reanalysed):

- Sufficient, flexible down-time;
- Commensurate remuneration;
- Accessibility to appropriate tools; and
- Open, respectful relationship with direct management.

Table 49 shows the top 10 ranked statements in this study and the resultant mapping to the themes identified in this study as well as those identified in the Gaylard (2004) study. The table also gives an indication as to whether or not the statement found in the most important statements in this study was also deemed to be one of the most important in the Gaylard (2004) study. The cells highlighted green denoting a correspondence in the themes between this study and the Gaylard (2004) study. The themes highlighted in red are those that resulted in a different theme mapping in this study when compared to the Gaylard (2004) study. The statement in question ‘having a competent manager’ was categorised differently by the two researchers. In this research, the emphasis was on the fact that only if a manager is competent, can there be respect for the manager in that position, hence it being categorised as ‘open, respectful relationship with direct management’. The two statements in the table that do not have corresponding Gaylard (2004) themes are those statements that appeared in the top 10 statements in the current study but were not in the top 10 of the Gaylard (2004) study.

Table 49: Top ten ranked statements and the corresponding theme mapping

Top 10 ranked statements from the survey results	Statement contained in Gaylard top 10	Underlying theme based on the survey results	Original Gaylard theme (2004)
Having a good balance between my work and home life.	✓	Sufficient, flexible down-time	Work/home balance
Having a competitive market-related remuneration package.	✓	Commensurate remuneration	Performance-related financial reward
Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	✓	Accessibility to appropriate tools	A performance-enabling environment
Being financially rewarded in accordance with my contribution and performance.	✓	Commensurate remuneration	Performance-related financial reward
Having open and honest two-way communication channels with my direct manager.	✓	Open, respectful relationship with direct management	Clear and open communication channels with direct management
Having flexible work hours.	✘	Sufficient, flexible down-time	
Having sufficient leave and the ability to exercise it when most suitable to me.	✘	Sufficient, flexible down-time	
Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	✓	Commensurate remuneration	Performance-related financial reward
Having a competent manager.	✓	Open, respectful relationship with direct management	A performance-enabling environment
Having a clear understanding of what is expected of me.	✓	Open, respectful relationship with direct management	Clear and open communication channels with direct management

There was one theme identified in the Gaylard (2004) study as important, but which did not appear to be important to the respondents of the current study in the retention decision – this theme was named ‘well-developed interdependence with other colleagues’ in the Gaylard (2004) study. The possibility exists that in the still uncertain economic climate, one of the self-preservation mind-sets makes it irresponsible to make friends at work, as any employee’s future at any organisation could be considered tenuous.

Table 49 shows clear similarities between the themes highlighted in this study and the themes identified in the Gaylard (2004) study. These similarities are discussed under headings representing each of the themes: sufficient, flexible downtime; commensurate remuneration; accessibility to appropriate tools; and open, respectful relationship with direct management. The following discussion should be read in conjunction with Table 49.

5.3.1 *Sufficient, flexible down-time*

The statement considered to be most important in this study, as well as in the Gaylard (2004) study, was ‘having a good balance between my work and home life’. The Gaylard (2004) study contains a theme called ‘work/home balance’, into which only the work-life balance statement is classified. In the conclusion to his study Gaylard suggested: “The literature does not place much emphasis on this aspect as an important retention variable” (Gaylard, 2004, p. 116). This has changed considerably since 2004 when the Gaylard (2004) study was concluded. In fact, work-life balance (Deery, 2008; Luftman, 2008; Sumner, 2008), or career-life balance (Wickham & Fishwick, 2008), is one of the most discussed variables when it comes to employee turnover, and specifically IT professional retention and turnover (Deery, 2008; Luftman, 2008; Sumner, 2008). This theme falls squarely into the Mano-Negrin (1998) attitudinal construct of ‘environment’. One of the key components of work-life balance is the addressing and combating of stress in the lives of the IT professionals. One of the physical demands of being an IT professional is the long hours associated, and more recently required, when working in the IT field, as well as the almost inevitable requirement to work

standby hours. The stress caused by the physical demands on IT professionals is often referred to as ‘technostress’ and can also lead to exhaustion and burnout (Salanova, et al., 2012; Sethi, et al., 2004; Shropshire & Kadlec, 2012), which leads to IT professionals seriously considering leaving their organisation, or even more drastically, leaving the IT field as a whole.

Other statements that are included in this ‘sufficient, flexible down-time’ theme relate to flexible work hours and sufficient leave. Flexible work arrangements are also currently being considered by many employers in order to retain employees (Harpaz, 2002; Institute of Management & Administration, 2008a, 2009a; Lanigan, 2008). These include staggered work hours and telecommuting. There are opposing opinions on the productivity of employees making use of flexible work arrangements (see Lanigan (2008) and Wickham and Fishwick (2008)), however, the majority of employees still find the provision of flexible work arrangements more important in the retention equation (K. S. Lee, 2008) than financial reward. Many employees stay with organisations where they are dissatisfied (Accenture, 2012), just because they have flexibility in their work arrangements. Flexible work arrangements are critical to women and Harris (2012) is of the opinion that the lack of consideration in these aspects institutes significant barriers to entry into the IT field for women in particular.

> “A flexible benefits package is very appealing to employees. It allows them the option to choose and tailor benefits to suit their individual requirements” (Lanigan, 2008, p. 50).

This may include aspects such as annual leave and the sufficient provision thereof, which is another critical aspect relating to downtime. This forms part of the quality of work-life experience expected by employees and is a basic form of compensation, or extrinsic reward (Yeo & Li, 2011).

5.3.2 *Commensurate remuneration*

Although not always one of the accepted traditional benefits related to retention, financial reward has always had a role to play in an employee’s intent to stay or

desire to move. Into the second decade of the 21st century, a great deal of focus is placed on the intangible rewards required by the likes of the generation Y employees (Shem, 2008), reward, and especially financial remuneration is still a major contributor in any employee retention strategy (Emerald Group Publishing Limited, 2007; Ferratt, et al., 1999; K. S. Lee, 2008; Sanjay, 2006). This theme falls squarely into the Mano-Negrin (1998) attitudinal construct of 'returns (reward and recognition)'. The elements of reward emphasised in this study and required by employees in order for them to consider staying with an organisation are that the reward and especially any financial remuneration be fair, competitive and performance-based (Deery, 2008; Flood, et al., 2001; Rethinam & Ismail, 2008). The need to be appropriately recognised is especially important to high performing (HIPO) IT professionals (Emerald Group Publishing Limited, 2008a, 2008b; Luftman, 2008). Both Kinnear (1999) and Gaylard (2004) recognised the importance of financial reward in the organisational commitment of knowledge workers and retention of IT professionals respectively.

5.3.3 *Accessibility to appropriate tools*

Kinnear (1999) highlights the need for knowledge workers to have access to leading edge technology and that the provision thereof by employers acts as a key differentiator in the retention of these employees. Kinnear (1999) further states that this requirement to have access to the most up to date technology is one which differentiates the knowledge worker group of employees from other employees. This requirement to have the necessary access to the latest technology and tools is even more important for the IT professional, as their entire working existence revolves around technology and the appropriate application thereof. This theme, namely 'accessibility to appropriate tools', stands out as the only one with a single statement associated with it ('having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)'); however, this requirement is so critical, that it warrants this dedicated theme.

Luftman (2008) specifically refers to the IT professional's need to stay abreast of changing technology and that in order to ensure commitment, organisations

should encourage their employees to stay up to date with the emerging technologies. If knowledge workers and IT professionals are to succeed in environments of ambiguity and uncertainty and the need for flexible behaviour, they are required to maintain the highest levels of professional skills (Adelstein, 2008). The requirement for continuous learning, as expressed by Drucker (1999) is no more evident than in the working life of the IT professional, and only by having access to the most recent tools, is the IT professional able to maintain the required learning and keep up to date with technology. In a tight labour market, Ferratt et al. (1999) believe that the availability of new technologies is considered one of the most important elements for competitive differentiation for any organisation.

5.3.4 *Open, respectful relationship with direct management*

The concept of 'clear and open communication channels' comes through as important in the Gaylard (2004) study and the requirement for an open and honest relationship between employee and manager is reinforced. This particular theme, 'open, respectful relationship with direct management', which is similar in concept to the Gaylard (2004) theme mentioned, is related to two of the Mano-Negrin (1998) attitudinal constructs discussed in Chapter 2: Literature Review, namely 'supervision' and 'feedback'. The theme entitled 'open, respectful relationship with direct management' relates to both the necessary channels available to employees in communicating with their direct managers and vice versa, as well as the feeling of respect an employee feels towards a competent manager. In order to engender trust in the direct manager, an employee needs to feel confident that their manager is being honest, doing what they say they are going to do, communicating and supporting company policies, taking the responsibility for the development of their team, and encouraging the team (Institute of Management & Administration, 2008b; Sanjay, 2006). One often hears the saying that 'an employee does not leave an organisation, they leave a manager'; it is therefore very important that employees feel comfortable with their direct manager. Especially in trying economic times, a manager is often the one looked to for support and encouragement and a sense of security (Glen, 2009) and if they are

not able to provide these emotional crutches, employees may feel that they are better off elsewhere.

The direct manager is the employee's connection to the organisation as a whole. Lanigan (2008) asserts that employee feelings of involvement and commitment emanate from good communication. It is therefore very important for the manager to fulfil the role of communication broker to keep the employee abreast of all the critical organisational communications and key happenings, changes and accomplishments in order for the employee to feel committed to the organisation. In this way, the direct manager performs a key role in the retention of the employee. In order to retain employees and specifically good IT professionals, they need to feel actively involved in the organisations for which they work. This requires good overall organisational communication on vision, goals and strategies, as well as direct individual communication from management to convey the individual's importance in realising these goals, both of which are the responsibility of the direct manager to ensure.

5.3.5 *Summary of interpretation*

This research has indicated that in the quest to retain their IT professionals, an organisation needs to consider the tangible, as well as intangible aspects important to their employees. These include most importantly, the provision of work-life balance, appropriate financial reward and access to the most up-to-date tools and technology.

The research proposition as presented in Section 2.4.1 was upheld, but has been restated based on the researchers own interpretation of the themes.

5.3.6 *Restatement of Research Proposition 1*

The most important retention themes that influence an IT professional's decision to remain with an organisation are:

- Sufficient, flexible down-time;
- Commensurate remuneration;
- Accessibility to appropriate tools; and
- Open, respectful relationship with direct management.

5.4 Discussion pertaining to Research Proposition 2

One of the secondary objectives of this research was to determine the least important areas that IT professionals considered essential to their remaining with an organisation, and to determine whether these areas mapped to the set of traditional retention statements presented in the survey. The second research proposition, based on the results of the original Gaylard (2004) study, therefore stated the following: The traditional retention variables such as those in the following list will have little influence on an IT professional's decision to remain with an organisation:

- Job security;
- Loyalty;
- Share options;
- Pension/provident scheme; and
- Health care benefits.

In reanalysing the Gaylard (2004) data, only eight of the most important variables from the original study were still present in the top 10 most important variables after the reanalysis. The research proposition was therefore amended based on the reanalysis to include only the following themes: elements of the job itself; traditional retention benefits; and social interaction. The original theme 'job-related administrative processes' has been discarded due to its absence in the reanalysed themes.

The following themes were identified (from six statements) in the current study as those least likely to cause IT professionals to consider leaving their current organisation, if they were not present; the first two of these high-level themes mapped to the concepts identified in the Gaylard (2004) study (both original and reanalysed):

- Job environment and requirements;
- Social interaction; and
- Project and teamwork.

Table 50 shows the bottom 10 ranked statements in this study and the resultant mapping to the themes identified in this study as well as those consistent with the reanalysed Gaylard (2004) themes. The table also gives an indication as to whether or not the statement found in the least important statements in this study was also deemed one of the least important among the reanalysed Gaylard (2004) statements. The cells highlighted green denote a correspondence in the themes between this study and the Gaylard (2004) study. These clear similarities between the themes highlighted in this study and the themes identified in the Gaylard (2004) study, as well as the additional theme that resulted from this study, are discussed under headings representing each of the themes: job environment and requirements; social interaction; and project and teamwork. Only six of the bottom 10 statements were used to derive these three themes.

There were no themes that resulted in a logically different theme mapping from this study to the reanalysed Gaylard (2004) themes. The two statements that do not have corresponding Gaylard (2004) themes (cells in the column are blank and shaded dark grey) are those statements that appeared in the bottom 10 statements in the current study but were not in the bottom 10 of the reanalysed Gaylard (2004) statements. This analysis highlighted four statements that did not map to any particular theme.

Table 50: Bottom 10 ranked statements and the corresponding theme mapping

Bottom 10 ranked statements from the survey results	Statement contained in reanalysed Gaylard bottom 10	Underlying theme based on the survey results	Reanalysed Gaylard (2004) theme
Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	✓	*No theme identified*	*No theme identified*
Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	✓	Job environment and requirements	*No theme identified*
Being able to do project work.	✓	Project and teamwork	*No theme identified*
Having opportunities to obtain global exposure and experience.	✗	*No theme identified*	
Working in teams.	✗	Project and teamwork	
Having the freedom and time to interact socially with other employees at work.	✓	Social interaction	Social interaction
Working in an ever-changing environment.	✓	*No theme identified*	*No theme identified*
Having a close colleague or good friend at work.	✓	Social interaction	Social interaction
Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	✓	Job environment and requirements	Elements of the job itself
Being given share options in the company.	✓	*No theme identified*	Traditional retention benefits

In this study, there were no specific rational themes related to the traditional retention variables as listed in the proposition, found in the 10 statements that least influence turnover among IT professionals. The statement that came out as the least important of all the statements when it came to retention variables affecting the turnover intentions of IT professionals, was 'being given share options in the company'. While this is one of the traditional retention variables, the

rest of the statements in the list of 10 least important do not relate to the traditional variables in any way whatsoever, and therefore no specific theme for traditional retention variables has been identified for this proposition. The statement relating to share options, together with the statement 'receiving medical aid benefits' are the two statements ranked in the bottom 10 in both the original Gaylard (2004) study, as well as the reanalysed Gaylard (2004) data, that pertain to the theme 'traditional retention benefits'. The list of statements from the survey classified as traditional retention benefits is presented in Table 51, together with the ranking of the statement in the current and the reanalysed Gaylard (2004) studies, as well as the ranking quartile for both studies.

Table 51: Comparative importance of traditional retention variables in both surveys

Traditional retention variables	Statement	Ranking of current survey results	Ranking of re-analysed Gaylard (2004) survey results	Ranking quartile for the current survey	Ranking quartile for the re-analysed Gaylard (2004) survey
Job security	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	26	18	3rd	**2nd**
Loyalty	Having a sense of loyalty to remain with and continue to serve the organisation	38	29	**4th**	3rd
Share options	Being given share options in the company	50	50	**4th**	**4th**
Pension/ provident scheme	Being part of a pension or provident scheme	22	14	**2nd**	**2nd**
Healthcare benefits	Receiving medical aid benefits	28	46	3rd	**4th**

The two least important statements (see Table 51) related to traditional benefits in this study were firstly the statement related to loyalty to the organisation, and secondly the previously mentioned statement linked to share options. These were both found in the fourth quartile of the ranked list in order of importance of statements pertaining to an IT professional's intention to remain with the current organisation. The statements relating to job security and healthcare benefits were also found to be relatively unimportant, and appeared in the third quartile (bottom half) of the ranked list. The one so-called traditional benefit that appears to be important to IT professionals is that of pension and provident schemes. In reanalysing the Gaylard (2004) data, the provision of pension and provident funds ranked very highly in the second quartile, indicating its importance to IT professionals. The relative importance of this variable both in 2004 and today may be because more and more people are retiring with very little by way of monetary resources to live on. This is foremost in many people's minds and has a significant effect on their financial planning processes, possibly by seeing their parents struggling in their retirement. Additionally, much emphasis is placed these days on the need to be financially secure in retirement, and this is possibly having an effect on IT professionals and the variables influencing their retention and turnover intentions.

From the results of this study, and in comparison to the Gaylard (2004) study, it would appear as if the importance of the provision of healthcare benefits has increased in the last eight years, from a ranking in the bottom five of the fifty variables to a 'high' of close on halfway up the list of importance. This may be merely a coincidence or a result of the different samples, but it may also be due to the perceived decrease in quality healthcare provided by the public healthcare sector, forcing people to consider the vastly more expensive private healthcare options. This in turn would force this variable up in importance and the provision or assistance in covering these costs by the employer could be an overriding factor in the turnover decision. Loyalty to the organisation and the need for job security have both decreased in importance; this may be caused by the generation Y effect and the decreasing number of generation X employees still in active employment.

The discussion of the themes relating to the least important variables in the retention of the IT professional, and resulting from this study follows, should be read in conjunction with Table 50.

5.4.1 *Job environment and requirements*

The concept of 'environment' is very broad and contains many aspects involved in the retention of employees. This specific theme, 'job environment and requirements', is to do more with the physical environment in which an employee spends the most of their time, as well as have a job with manageable stress levels and satisfactory work elements. This theme and corresponding underlying meaning was also identified in Gaylard's (2004) study as one of the least important themes in the retention of IT professionals.

> "Employees perceive quality when fundamental expectations about the workplace and their job are adequately met" (Yeo & Li, 2011, p. 39).

This theme is also related to the literature concept of 'quality of work life' (Rethinam & Ismail, 2008; Yeo & Li, 2011) when referring to specifically the physical work environment as well as the actual work the employee is required to do. While this is one of the lowest ranked themes when it comes to important aspects affecting the retention of employees, it is possibly due to the fact that this is taken for granted, that it is not ranked higher.

5.4.2 *Social interaction*

The 'social interaction' theme relates to interpersonal relationships with work colleagues having the opportunities to interact socially with these colleagues. This theme was also identified by Gaylard (2004) as one of the least important themes to result from that research. Social interaction is important to break down barriers (Kirby, 2005) and foster understanding of other employees' individual circumstances. It also leads to closer relationships with management, thereby improving the employees' feelings of involvement, of being seen as an individual

and making a difference (Chew & Chan, 2008; Emerald Group Publishing Limited, 2008b), which are key aspects of retention, especially for generation Y employees (Shem, 2008).

5.4.3 *Project and teamwork*

As with the physical work environment, teamwork also has a significant impact on an employee's quality of work life (Yeo & Li, 2011). Teamwork is a form of reciprocal collaborative enquiry enabling employees to leverage of other team members' experience and outperform their own as well as the organisation's expectations. Collaboration also encourages and promotes social interaction, encourages communication and improves negotiating skills thereby offering employees "an enriching work experience" (Yeo & Li, 2011, p. 41). This theme did not form part of the original Gaylard (2004) categories identified as those least important in affecting IT professional turnover, and has possibly been identified here due to the increasing levels of autonomy required by employees, and possibly the move towards virtual teams in recent years (Beise, 2004).

5.4.4 *Summary of interpretation*

The findings of this research indicate that the provision of traditional retention benefits is not necessarily of little or no importance to the IT professional in their decision to stay with an organisation. Some of the traditional benefits are still valued by IT professionals in their retention decision. There are nevertheless three themes indicative of low importance in the IT professionals' turnover decision. These are 'job environment and requirements', 'social interaction', and 'project and teamwork'.

The research proposition as presented in Section 2.4.2 was not upheld. The restated proposition follows.

5.4.5 *Restatement of Research Proposition 2*

The traditional retention variables such as those in the following list may have a varying influence on an IT professional's decision to remain with an organisation:

- Job security;
- Loyalty;
- Share options;
- Pension/provident scheme; and
- Health care benefits.

In addition, the least important retention themes that influence an IT professional's decision to remain with an organisation are:

- Job environment and requirements;
- Social interaction; and
- Project and teamwork.

5.5 Discussion pertaining to Research Proposition 3

The most important objective of this research was to determine the retention factors that IT professionals considered essential to their remaining with an organisation. The third research proposition, based on the results of the original Gaylard (2004) study, therefore stated the following: The variables that have the most influence on IT professionals' decisions to remain with an organisation may be meaningfully grouped by factor analysis into the following six factors:

- *Factor 1*: Equity and enablement for high performance;
- *Factor 2*: Liberated and empowered culture;
- *Factor 3*: Effective and interactive communication channel;
- *Factor 4*: Environment rich in personal growth opportunities;
- *Factor 5*: Standard employment contract benefits; and
- *Factor 6*: Social interaction.

While the Gaylard (2004) study resulted in a six-factor, factor analysis solution, this study found the optimal factor solution to be a three-factor, factor analysis solution. This solution was pursued as the first step in the addressing of this research proposition.

In order to compare the two studies appropriately, a six-factor, factor analysis solution was also prepared. Due to the fact that the previous Gaylard (2004) study had executed the factor analysis based on the rescaled data, a six-factor solution also had to be run on the Gaylard (2004) base data in order to validly compare the two six-factor solutions (between this study and the solution based on the reanalysed data). This reanalysed solution did not correspond completely with the original solution in terms of the statements loaded into the various factors. The factors that were common were those relating to reward, social interaction and traditional employment benefits.

By interpreting the meaning of each of the reanalysed Gaylard (2004) groupings, the reanalysed factors were named appropriately as follows:

- *Factor 1*: Fair reward through recognition, communication, training and adequate tools;
- *Factor 2*: Personal and corporate motivation to remain loyal;
- *Factor 3*: Enabling performance and career management processes;
- *Factor 4*: Self-motivated, creative and innovative environment;
- *Factor 5*: Social interaction and teamwork; and
- *Factor 6*: Traditional employment benefits.

The comparison is drawn between the two factor analyses conducted on the current data (three-factor and six-factor) and the factor analysis on the reanalysed data (six-factor) and is presented in Table 52.

Table 52: Summary of broad themes and corresponding factors – three-factor solution and six-factor solution (both studies)

Broad theme	Factor (three-factor)	Factor description	Factor (six-factor)	Factor description	Gaylard Factor (six-factor)	Gaylard (2004) reanalysed factor description
Reward	F 1	Performance-related opportunity, reward and recognition	F 1	Liberating, enabling and rewarding personal work experience	F 1	Fair reward through recognition, communication, training and adequate tools
Motivation to stay	F2	Corporate alignment and personal development	F 2	Freedom to determine personal and organisational destiny	F 2	Personal and corporate motivation to remain loyal
Enabling performance			F 6	Adequate provision to enable optimal performance	F 3	Enabling performance and career management processes
Culture/ environment	F 3	Secure working environment with traditional benefits	F 3	Inspiring, supportive, learning culture	F 4	Self-motivated, creative and innovative environment
Traditional benefits			F 4	Traditional employment provisions	F 6	Traditional employment benefits
Teamwork and play			F 5	Constructive teamwork	F 5	Social interaction and teamwork

The following discussion tracks the broad themes presented in Table 52, and addresses the individual factors of each of the three factor solutions under each broad theme.

5.5.1 *Reward*

Table 53: Summary of factors pertaining to broad theme: reward

REWARD				
Solution	**Factor description**	**Importance within the solution**	**Reference table for the statement loadings**	**Number of statements loading into this factor**
Three-factor solution	Performance-related opportunity, reward and recognition	2nd	Table 17	28
Six-factor solution	Liberating, enabling and rewarding personal work experience	4th	Table 22	16
Six-factor solution (Gaylard reanalysed)	Fair reward through recognition, communication, training and adequate tools	4th	Table 30	21

This broad theme, summarised in Table 53, deals primarily with the reward and recognition of employees for good performance through appropriate communication from direct management to that effect, the provision of tools and training to enable high performance and the knowledge that their personal goals and career growth is in line with that of the organisation as a whole; that their personal performance has a positive impact on the organisation as a whole.

'Reward' was one of the original Gaylard (2004) themes that remained through the reanalysis, originally labelled 'equity and enablement for high performance'.

Performance-related and commensurate financial reward is still one of the key motivators of employees and one of the key push (and pull) factors that influence retention and both the stay and leave attitudes, despite the fact that it no longer receives as much recognition for these as in previous decades (Emerald Group Publishing Limited, 2007; Ferratt, et al., 1999; K. S. Lee, 2008; Sanjay, 2006).

Related to the tangible rewards of financial remuneration, is the need, especially among the generation Y employees for intangible reward in the form of

recognition. Recognition is defined by the Emerald Group Publishing (2008b) as "noticing and articulating value" (Emerald Group Publishing Limited, 2008b, p. 7). They suggest that it is easy to confer a reward without articulating an employee's value to a company, but it does not replace true recognition. Shem (2008) maintains that, in interacting with generation Y employees, managers should "give praise generously, personally, [and] sincerely" (Shem, 2008, p. 2).

Coupled with the need for recognition, is the requirement for this recognition to be communicated, and the need for the IT professional to feel that they are performing in line with their own goals and career paths, as well as aligning this performance with that of the organisation.

Included in this theme is a certain element of career growth and personal performance improvement particularly through training and the accessibility to the latest tools and technologies. These characteristics relate back to Mano-Nergin's (1998) attitudinal construct of 'enrichment'. Already as far back as 1999, Ferratt et al. (1999) identified the availability of new technologies and training opportunities as two of the most important elements for competitive differentiation in a tight labour market. In a 2008 study (Institute of Management & Administration, 2008a), 21 per cent of the respondents cited the provision of professional development opportunities to be key in IT employee retention and Luftman (2008) specifically refers to the IT professional's need to stay abreast of changing technology. In order for organisations to ensure commitment, as well as remain competitive, they should encourage their IT employees to stay up to date with the emerging technologies.

In all three of the factor solutions presented, this theme came through as relatively to very unimportant in the IT professional's retention decision, which is expected, as according to the literature and the findings of previous studies, monetary remuneration is not considered the most important variable by IT professionals in determining their turnover intent.

5.5.2 *Motivation to stay*

Table 54: Summary of factors pertaining to broad theme: motivation to stay

MOTIVATION TO STAY				
Solution	**Factor description**	**Importance within the solution**	**Reference table for the statement loadings**	**Number of statements loading into this factor**
Three-factor solution	Corporate alignment and personal development	1st (most)	Table 18	22
Six-factor solution	Freedom to determine personal and organisational destiny	5th	Table 23	12
Six-factor solution (Gaylard reanalysed)	Personal and corporate motivation to remain loyal	1st (most)	Table 31	13

This broad theme, summarised in Table 54, deals primarily with personal development, career growth and high personal performance in whichever direction is mutually agreed upon, remaining true to oneself in a social and ethical organisation where excellence and continuous improvement is valued and strong leadership is evident; this ultimately leads to loyalty and motivation to remain with the organisation.

The implication of the new psychological contract is that the employee is no longer forced to be loyal to the organisation (Morgan, et al., 2004). While it is generally thought that highly-skilled knowledge workers, such as IT professionals, are more loyal to their careers than to any one organisation (Chew & Chan, 2008; Loogma, et al., 2004; Scholarios, et al., 2008; Wickham & Fishwick, 2008), it is also accepted that organisations providing opportunities for employees' personal growth encourages retention (Maurer & Lippstreu, 2008; Palan & Berhad, 2007; Scholarios, et al., 2008). In order to encourage retention among IT professionals and to promote stay attitudes it is therefore in the organisation's best interest to ensure their employees are sufficiently skilled in the right area (O'Neil, 2009), and have a clearly mapped out career path (Emerald Group Publishing Limited,

2008a) to a high performance future. Gaylard (2004) mentions that counter-intuitively, the provision of personal growth opportunities does not encourage employees to leave with their newly-acquired skills, but instead fosters a sense of loyalty and retention intent.

In recent decades there has been a transition away from the traditional psychological contract (Babiak & Hare, 2006), traditionally more applicable to blue-collar workers in industrial organisations to new psychological contracts tailored specifically to knowledge workers and their unique requirements including work-life balance and a certain quality of work life (Yeo & Li, 2011). This has evolved in the 21st century into a more specific concept of career-life balance (Herriot, et al., 1997; Wickham & Fishwick, 2008) for IT professionals.

In two of the factor solutions presented in this research, the three-factor solution suggested as the optimal solution for this data, as well as the reanalysed Gaylard (2004) six-factor solution, this theme came through as the most important theme in retaining IT professionals. In the six-factor solution executed on the data from this research, this theme came through as the second lowest in importance in retaining the IT professional and was very much contrary to the other findings, and the expectations.

5.5.3 *Enabling performance*

Table 55: Summary of factors pertaining to broad theme: enabling performance

ENABLING PERFORMANCE				
Solution	**Factor description**	**Importance within the solution**	**Reference table for the statement loadings**	**Number of statements loading into this factor**
Three-factor solution	Corporate alignment and personal development	1st (most)	Table 18	22
Six-factor solution	Adequate provision to enable optimal performance	6th (least)	Table 27	6
Six-factor solution (Gaylard reanalysed)	Enabling performance and career management processes	3rd	Table 32	7

This broad theme, summarised in Table 55, deals primarily with the corporate and management backing to develop and get varied exposure and perform in line with career mapping and to have access to all the necessary tools and personal requirements, such as quality of work life and work-life balance, in order to perform optimally.

The concept of work-life balance is discussed in Section 5.3.1 'Sufficient, flexible down-time'. The discussions around this topic in the context of Research Proposition 1 are all valid in this context as well. What is very interesting it that while the variable 'work-life balance' was the most important variable identified by the IT professionals in responding to the survey, it was included as a contributing variable in the least important factor in the six-factor solution conducted on this study's data.

It is crucial for IT professionals to feel that they have the confidence and support of their direct manager. This feeling will result from an open and honest relationship that the employee enjoys with their manager and the lack of this is

one of the most important reasons for employee turnover. Lanigan (2008) contends that employee feelings of involvement and commitment emanate from good communication. Finnegan (Institute of Management & Administration, 2008b) is of the opinion that one of the most important tasks of a manager, is to engender trust among their direct reports. This includes being honest, doing what you say you are going to do, communicating and supporting company policies, taking the responsibility for the development of their team, and encouraging the team (Institute of Management & Administration, 2008b; Sanjay, 2006).

Development of the team and the individual is vitally important, even and most especially, in challenging times, such as recessions. When money is tight, and where cost-cutting is an everyday occurrence in order to ensure organisational survival, O'Neil (2009) encourages organisations to continue training and career development efforts.

In line with the 'reward' theme, it is also important to provide the employees with the required leading edge technologies and tools in order to enable their performance (Luftman, 2008). These tools are not just appropriate as possible rewards for good performance; they are possibly the most critical contributory factors to organisational differentiation (Ferratt, et al., 1999).

In two of the factor solutions presented in this research, the three-factor solution suggested as the optimal solution for this data, as well as the reanalysed Gaylard (2004) six-factor solution, this theme, 'enabling performance', came through as very to moderately important in retaining IT professionals. In the six-factor solution executed on the data from this research, this theme came through as the lowest in importance in retaining the IT professional and was very much contrary to the other findings. The expectation, as the main contributing variable to this factor, was the provision of work-life balance, which was deemed the most important variable in the retention of IT professionals.

5.5.4 *Culture/environment*

Table 56: Summary of factors pertaining to broad theme: culture/environment

CULTURE/ENVIRONMENT				
Solution	**Factor description**	**Importance within the solution**	**Reference table for the statement loadings**	**Number of statements loading into this factor**
Three-factor solution	Secure working environment with traditional benefits	3rd (least)	Table 19	11
Six-factor solution	Inspiring, supportive, learning culture	2nd	Table 24	10
Six-factor solution (Gaylard reanalysed)	Self-motivated, creative and innovative environment	2nd	Table 33	6

This broad theme, summarised in Table 56, deals primarily with organisational cultures where personal opportunities for innovation and creativity abound in an autonomous, self-motivated initiative-driven environment, where continuous improvement through skills enhancement is encouraged and there is no element of fear of recrimination.

IT professionals thrive on the cutting edge 'toys' available for them to 'play' with. Many IT professionals enjoy these games so much that they will rather go where the technological excitement and growth potential is than stay for money (Luftman, 2008). It is therefore important to give them the 'toys' they require so that they can reward the organisation with good performance (Institute of Management & Administration, 2008a; Luftman, 2008).

In line with providing the IT professional with the requisite exposure to the most important technologies to do the job, it is also important to give them the autonomy and freedom to get the job done in the best way possible (Hamel, 2009). These trust-rich, high-autonomy environments allow the high performing

and generation Y (Shem, 2008) IT professionals to thrive (Drucker, 1999). In line with this trust that needs to exist between IT professional and management, "organisational adaptability, innovation, and employee engagement can only thrive in a high-trust, low-fear culture" (Hamel, 2009, p. 93) where information and ideas are shared freely, without fear of reprimand. This is the environment best suited to an IT professional, and in which they will do their best work.

In both the current and reanalysed Gaylard (2004) six-factor solutions, this theme, 'culture/environment', was deemed very important to IT professionals in their retention decisions – both of these factor solutions had this theme as the second most important theme. The three-factor solution, suggested as the optimal solution for this data, found this theme to be the least important in retaining IT professionals.

5.5.5 *Traditional benefits*

Table 57: Summary of factors pertaining to broad theme: traditional benefits

TRADITIONAL BENEFITS				
Solution	**Factor description**	**Importance within the solution**	**Reference table for the statement loadings**	**Number of statements loading into this factor**
Three-factor solution	Secure working environment with traditional benefits	3rd (least)	Table 19	11
Six-factor solution	Traditional employment provisions	1st (most)	Table 25	5
Six-factor solution (Gaylard reanalysed)	Traditional employment benefits	5th	Table 35	4

This broad theme, summarised in Table 57, deals primarily with the provision of traditional benefits, package structure and job and personal security and comfort.

‘Traditional benefits’ was one of the original Gaylard (2004) themes that remained through the reanalysis, originally labelled ‘standard employment contract benefits’.

As discussed in Section 5.4: Discussion pertaining to Research Proposition 2, the provision of traditional retention variables cannot be seen as the least important variables when retaining IT professionals. A number of these variables feature in the middle to high levels of importance to IT professionals, and could possibly be due to the current state of global economies subsequent to the 2008 global credit crunch. IT professionals are also feeling the pinch in terms of lower increases and incentives. This may be resulting in the big difference in the importance of this theme in this current study, when compared to the relative unimportance of this theme in the Gaylard (2004) (reanalysed) research.

In two of the factor solutions presented in this research, the three-factor solution suggested as the optimal solution for this data, as well as the reanalysed Gaylard (2004) six-factor solution, this theme came out as having moderate to low importance in retaining IT professionals. In the six-factor solution executed on the data from this research, this theme came through as the most important in retaining the IT professional and was very much contrary to the other findings, and the expectations.

5.5.6 *Teamwork and play*

Table 58: Summary of factors pertaining to broad theme: teamwork and play

TEAMWORK AND PLAY				
Solution	**Factor description**	**Importance within the solution**	**Reference table for the statement loadings**	**Number of statements loading into this factor**
Three-factor solution	There is no corresponding theme for the three-factor solution			
Six-factor solution	Constructive teamwork	3rd	Table 26	4
Six-factor solution (Gaylard reanalysed)	Social interaction and teamwork	6th (least)	Table 34	5

This broad theme, summarised in Table 58, deals primarily with working and interacting socially with colleagues and fellow team members, and having fun while doing this.

'Social interaction' was one of the original Gaylard (2004) themes that remained through the reanalysis; the label has remained unchanged.

Teamwork also has a significant impact on an employee's quality of work life (Yeo & Li, 2011). As discussed in Section 5.4.3, teamwork enables employees to leverage off other team members' experience and outperform their own as well as the organisation's expectations. Collaboration also encourages and promotes social interaction, encourages communication and improves negotiating skills thereby offering employees "an enriching work experience" (Yeo & Li, 2011, p. 41).

Social interaction is the other important aspect of this theme, and relates to the interpersonal relationships that employees have with other employees in their teams, departments and organisations. Social interaction and fun is important to break down barriers (Kirby, 2005) and foster understanding of other employees'

individual circumstances, which ultimately leads to better performing and happier teams (Yeo & Li, 2011).

There was no corresponding theme for social interaction, fun and teamwork in the three-factor solution suggested in this research. In both the current and reanalysed Gaylard's (2004) six-factor solutions, this theme, 'teamwork and play', was deemed unimportant to IT professionals in their retention decisions.

5.5.7 *Summary of interpretation*

The analysis conducted in this study indicated that the variables influencing the IT professionals' decisions to remain with an organisation can be grouped, in order of importance, into the following themes:

- Traditional employment provisions;
- Inspiring, supportive, learning culture;
- Constructive teamwork;
- Liberating, enabling and rewarding personal work experience;
- Freedom to determine personal and organisational destiny; and
- Adequate provision to enable optimal performance.

Contrary to expectation, the theme by far considered most important by IT professionals responding to this study was that of 'traditional employment provisions', which may be due to the relatively high importance of the provision of pension/provident funding, as well as healthcare funding, which are both important in the South African context. The second most important theme also came out relatively high up above the rest of the themes, namely 'inspiring, supportive, learning culture'.

The theme considered the least important was 'adequate provision to enable optimal performance'.

The research proposition as presented in Section 2.4.3 was not upheld, and has been restated based on the researchers own interpretation of the themes that emanated from this study.

5.5.8 *Restatement of Research Proposition 3*

The variables that have the most influence on IT professionals' decisions to remain with an organisation may be meaningfully grouped by factor analysis into the following six factors:

- *Factor 1*: Liberating, enabling and rewarding personal work experience;
- *Factor 2*: Freedom to determine personal and organisational destiny;
- *Factor 3*: Inspiring, supportive, learning culture;
- *Factor 4*: Traditional employment provisions;
- *Factor 5*: Constructive teamwork; and
- *Factor 6*: Adequate provision to enable optimal performance.

5.6 Discussion pertaining to Research Proposition 4

One of the primary objectives of this research was to determine whether there were any relationships between the IT professional's demographic variables obtained in the survey and the corresponding intention to leave the organisation. The fourth research proposition, based loosely on the original Gaylard (2004) study, therefore stated the following:

There is a moderately strong inverse relationship between IT professionals' level of job satisfaction and their intention to leave an organisation. In addition, there is no relationship between an IT professional's intention to leave an organisation and each of the following demographic categories:

- Current employer;
- Race;
- Gender;
- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained; and
- Current level of expertise.

This research proposition was altered when stating the proposition upfront due to the fact that the Gaylard (2004) research gathered different demographic information from this study as a result of the difference in targeted sample and correspondingly broader population. Gaylard (2004) requested the respondents to indicate their country of residence due to the fact that the Gaylard (2004) study sampled IT professionals from three different countries. This demographic information would have been irrelevant to this study as the current study focuses only on South African IT professionals. The only demographic variables common to both studies were age, level of job satisfaction and intention to leave. An additional seven demographic variables were added to this study and therefore the proposition was altered upfront to cater for these additions, as well as to remove the country of residence variable. No reanalysis was required in order to perform the analysis for this proposition.

As found in the original Gaylard (2004) study, this study indicated a moderately-strong inverse relationship between IT professionals' level of job satisfaction and their intention to leave an organisation. Employee job satisfaction and organisational commitment are key aspects of the 'stay' attitudes described by Mano-Negrin (1998). The employee value proposition is critical to enhancing job satisfaction, and especially the concept of job security (Corporate Leadership Council, 2006a), which when increased, ultimately leads to higher job satisfaction. Both of these can be mapped to employee engagement, which, according to the Corporate Leadership Council, is an indicator of performance and retention (Corporate Leadership Council, 2004). Logically and theoretically (Corporate Leadership Council, 2004) when an employee's engagement levels (job satisfaction and commitment) are high the employee's intention to leave is low. This explains the inverse relationship between an IT professional's level of job satisfaction and their intention to leave an organisation.

In addition to the relationship between job satisfaction and intention to leave, this study also indicated a relationship between the race demographic variable and intention to leave the organisation. A possible explanation for this relationship in South Africa specifically, is the existence implementation of policies such as

broad-based black economic empowerment (B-BBEE) and employment equity (Wöcke & Heymann, 2012; Wöcke & Sutherland, 2008). This has the effect that employees classified as 'black', and particularly those with specific skill sets such as IT, are in huge demand in the labour market. The economic laws of supply and demand dictate that where there is a demand, and a limited supply, the price of the resource increases. In the case of IT professionals, the resource pool is limited and IT professionals are all in demand, but for the 'black' individuals, this demand is much higher. They are able to move around freely in the job market, demanding ever-increasing salaries, which leads to a common perception that if black employees are dissatisfied and disengaged, they have the freedom to look elsewhere for employment without any reservation.

The opposite may be true for 'white' IT professionals. They may feel that due to the pressures placed on organisations to adhere to B-BBEE provisions, they do not feel able to change organisations, and therefore irrespective of their levels of job satisfaction and disengagement in their current organisation, they will not show any indications of intent to leave. This provides a possible explanation for the relationship between and IT professional's race and their intention to leave the organisation.

The analysis completed in this research study indicated that there are no additional relationships between any of the other demographic variables, namely current employer, gender, age, number of employees in current organisation, years of service with current organisation, highest university or equivalent qualification obtained, current level of expertise, and intention to leave. In similar research conducted by Wöcke and Heymann (2012), it was found that age and gender, as well as level of an employee's education did have an impact on the prevalence of push or pull factors in the turnover process. These relationships would need to be investigated further for IT professionals in more representative samples in order to draw further definitive conclusions.

The research proposition as presented in Section 2.4.4 was upheld only in part. Its restatement follows, and includes the additional relationship found in this research.

There is a moderately strong inverse relationship between IT professionals' level of job satisfaction and their intention to leave an organisation; as well as a relationship between IT professionals' race and their intention to leave an organisation. In addition, there is no relationship between an IT professional's intention to leave an organisation and each of the following demographic categories:

- Current employer;
- Gender;
- Age;
- Number of employees in current organisation;
- Years of service with current organisation;
- Highest university or equivalent qualification obtained; and
- Current level of expertise.

5.7 Discussion pertaining to Research Proposition 5

One of the secondary objectives of this research was to determine the most significant 'gaps' recognised by the respondents, between what they felt was important in the retention of IT professionals, and what they experienced in terms of retention in their current organisation. The fifth research proposition, based on the results of the original Gaylard (2004) study, therefore stated the following: The sample of IT professionals found the biggest 'gaps' in the provision of retention variables to fall into the following five themes:

- Performance-related financial reward;
- Job security;
- Training and opportunities for personal growth;
- Tools to enable high performance; and
- Clear communication between management and employees.

Through the reanalysis process of the ‘importance’ question (How important is this variable in my decision to remain with my current company?) and the ‘satisfaction’ question (To what degree is this variable satisfied at my current company?), and the different interpretations of the various categories, the biggest and smallest ‘gaps’ identified in the Gaylard (2004) study changed.

The biggest differences in the Gaylard (2004) study, identified through the reanalysis process were redefined as follows:

- Balance;
- Personally enriching career growth;
- Structured remuneration;
- Social interaction opportunities and close relationships;
- Traditional benefits; and
- Job and personal security.

The smallest differences in the Gaylard (2004) study, identified through the reanalysis process were redefined as follows:

- Personal freedom in a creative, excellence-driven culture;
- Clear communication of company's goals and how they map to personal goals;
- Loyalty without feeling bound; and
- Fun.

The biggest differences, ‘gaps’, in this study, between what is important to the IT professional in aiding retention, and what they experience in terms of retention in their current organisation, are documented in Table 59. This table also shows the correspondence of the common themes identified in the Gaylard (2004) study, based on the reanalysed data.

Table 59: Comparison of biggest differences

Biggest differences - current study	Corresponding biggest differences – Gaylard (2004) study (reanalysed data)
Fair and commensurate reward	Structured remuneration
Balance	Balance
Satisfactory teamwork	
Social interaction	Social interaction opportunities and close relationships
Global opportunity	
Constant change	

Three out of the six biggest differences corresponded between this study and the Gaylard (2004) study, based on the reanalysed data. They are highlighted in green in Table 59. The themes around reward, balance and social interaction, which were found to be common between the studies, indicate that the 'gaps' between what is important to the IT professional in aiding retention, and what they experience in terms of retention in their current organisation, are still high.

It is therefore important for the employers of IT professionals to take note of these 'gaps' and put process in place to address these differences.

The three biggest differences that featured in the reanalysed Gaylard (2004) theme categorisation but were not apparent in this study were the following:

- Personally enriching career growth;
- Traditional benefits; and
- Job and personal security.

While a mapping to original Gaylard (2004) results is not feasible due to the reanalysis that was required, the mapping to the reanalysed themes was done, and a summary of the results has been presented. Of the six categories, three categories map to the current research and three do not. The most important message that has stemmed from the analysis of this particular research

proposition is that two of the most important themes, namely ‘balance’ and ‘fair and commensurate reward’ are not being addressed adequately by the employers of IT professionals. In addition, insufficient provision is being made for ‘social interaction’ in the work place. The need for ‘global opportunity’ and the current prevalence of unprecedented ‘change’ and uncertainty are two relatively new themes that are not being provided for by organisations. Both of these may stem from the uncertainty arising from the global economic crisis and the current crime-related insecurity in South Africa, which may lead skilled IT professionals to want to work elsewhere, in a less volatile environment.

The smallest differences, ‘gaps’, in this study, between what is important to the IT professional in aiding retention, and what they experience in terms of retention in their current organisation, are documented in Table 60. This table also shows the correspondence of the common themes identified in the Gaylard (2004) study, based on the reanalysed data.

Table 60: Comparison of smallest differences

Smallest differences - current study	Corresponding smallest differences - Gaylard (2004) study (reanalysed data)
Mutually respectful relationship with direct management	
Control of personal destiny	
Optimised package and benefits	
Clear communication of company's goals and how they map to personal goals	Clear communication of company's goals and how they map to personal goals
Fun	Fun

Two out of the five smallest differences corresponded between this study and the Gaylard (2004) study, based on the reanalysed data. They are highlighted in green in Table 60.

The two smallest differences that featured in the reanalysed Gaylard (2004) theme categorisation but were not apparent in this study were the following:

- Personal freedom in a creative, excellence-driven culture; and
- Loyalty without feeling bound.

While these ‘smallest’ differences are interesting pieces of information, they are not critical to the retention of IT professionals. The original Gaylard (2004) study did not draw any conclusions based on the smallest ‘gaps’. It is nevertheless interesting to note that the IT professionals that responded to this survey were of the opinion that their expectations were being met when it came to their relationships with direct management, their control of their own careers within the organisation, their remuneration package, the mapping of their personal goals to the goals of the organisation, and lastly, fun.

Based on the differences in the themes extracted from this research, and compared to the reanalysed Gaylard (2004) data, the research proposition presented in Section 2.4.5 has not been upheld and a restatement follows:

The sample of IT professionals found the biggest ‘gaps’ in the provision of retention variables to fall into the following six themes:

- Fair and commensurate reward;
- Balance;
- Satisfactory teamwork;
- Social interaction;
- Global opportunity; and
- Constant change.

5.8 Conclusion

This research has identified a number of factors considered important by South African IT professionals, in their retention, specifically in the financial services sector.

The research has indicated that in the quest to retain their IT professionals, organisations needs to consider the tangible, as well as intangible aspects

important to their employees. These include most importantly, the provision of work-life balance, followed by appropriate financial reward and access to the most up-to-date tools and technology. The research also concluded that traditional retentions benefits, such as the provision of healthcare benefits and job security, are of varying importance to IT professionals in their turnover intentions. The traditional provision of pension/provident funding is considered to be of high importance while the option to acquire shares in the organisation is the least important variable of all, which is consistent with previous research.

The analysis conducted in this study indicated that the variables influencing the IT professionals' decisions to remain with an organisation could be grouped, in order of importance, into the following themes:

- Traditional employment provisions;
- Inspiring, supportive, learning culture;
- Constructive teamwork;
- Liberating, enabling and rewarding personal work experience;
- Freedom to determine personal and organisational destiny; and
- Adequate provision to enable optimal performance.

Contrary to expectation, by far the theme considered most important was that of 'traditional employment provisions', which may be due to the relatively high importance of the provision of pension/provident funding, as well as healthcare funding, which are both important in the South African context. The second most important theme, namely 'inspiring, supportive, learning culture', also came out relatively high above the rest of the themes.

The theme considered the least important was 'adequate provision to enable optimal performance', which was unexpected, as the most important variable loading into this factor was work-life balance, which is the most important variable identified in this study in the influence of IT professionals' retention decisions.

This study also investigated the possible link between certain demographic variables and an IT professional's intention to leave the organisation. While the

moderately inverse relationship between job satisfaction and intent to leave was expected, as this had been highlighted in previous research, the relationship between an IT professional's race and their intention to leave was unexpected.

The final aspect of this study involved identifying the most significant 'gaps' recognised by the respondents, between what they felt was important in the retention of IT professionals, and what they experienced in terms of retention in their current organisation. The most important message that has stemmed from the analysis of this particular research proposition is that two of the most important themes, namely 'balance' and 'fair and commensurate reward' are not being addressed adequately by the employers of IT professionals. In addition, insufficient provision is being made for 'social interaction' in the work place. The need for 'global opportunity' and the current prevalence of unprecedented 'change' and uncertainty are two relatively new themes that are not being provided for by organisations. Both of these may stem from the uncertainty arising from the global economic crisis and the current crime-related insecurity in South Africa, which may lead skilled IT professionals to want to work elsewhere, in a less volatile environment.

These findings reinforce many of the known retention factors that influence IT professionals, as well as highlighting some interesting unexpected outcomes. All of the research and inferences may be considered important in the strategies implemented in retaining South African IT professionals.

This chapter concerned the explanation and interpretation of the results found in the previous chapter. The following chapter provides a holistic conclusion to this study.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter commences with a holistic conclusion to this study, considering the findings derived from the analysis performed on the data and the conclusions drawn with reference to the these findings and distilling these into a coherent conclusion.

Following this conclusion, recommendations are made to the various stakeholders in this research, based on the findings and conclusions of the research.

The chapter and research report concludes with suggestions for further research that can be conducted towards the understanding of the retention factors influencing IT professionals.

6.2 Conclusions of the study

This research study was undertaken in the context of global and local economic instability, which has led to downsizing and budget cuts in many organisations both worldwide and in South Africa. The prevailing attitude among many employees in sectors across the board is that of fear for their jobs and their future. This need for job security has resulted in reduced turnover rates and has encouraged employee commitment and retention. This commitment may however provide a false sense of security for organisations, as it may not be organisational commitment on the part of the employees, but rather lifestyle commitment and the fundamental need for employment. In South Africa, where unemployment is rife and these fears are very real, organisations need to guard against taking advantage of the current situation through taking advantage of their employees.

The South African IT professional, though, has been largely unaffected by these concerns. The critical IT skills shortage that existed before the global economic meltdown has persisted, though to a lesser extent, through the crisis and all

indications are there that this will continue for many years into the future. The lack of an adequate pipeline of new entrants into the field is one of the predictors of this ongoing crisis, as well as the fact that there are still many critical skills leaving the country through emigration.

IT skills are still in short supply, so IT professionals, especially the high-performing ones, are at liberty to move around almost at will, and with the ability to write their own cheques in terms of salaries. This has potentially catastrophic implications for organisations where IT skills form the basis for their competitive edge. Many of the financial services sector organisations fall into this category. There is therefore a constant need for organisations to differentiate themselves in the eyes of the IT professional as being the employer of choice, so that they can attract and then, more importantly, retain these scarce skills.

The primary aim and purpose of this research study was to identify the most important retention factors that IT professionals in the South African financial services sector perceived to influence their decision on whether to stay with an organisation or not.

In conducting this research, and in agreement with the research findings of the Gaylard study (2004), to which this study is compared, the most important variable influencing the retention of IT professionals is the requirement for work-life balance programmes and practices. This balance may not merely be as a result of employees wanting more time at home; it may have its roots in the fundamental work requirements of the IT profession itself. Many IT professionals are required to work long hours on projects in order to ensure their on-time completion. They are also often required to put in standby hours, which could require them to be on-call for IT emergencies that may arise at any time of the day or night. Through these requirements, IT professionals may indeed genuinely need, and not just perceive the need for, the time at home with their families, to find a balance between their work and home lives to de-stress, due to the onerous demands of the profession itself. No amount of money or financial incentive will resolve this innate need. Additionally, the bad reputation that the IT profession may inadvertently be creating for itself, could in a way be turning prospective

employees away from the profession, thereby adding to the skills shortage, thus creating a self-cannibalising cycle in the profession.

The concept of work-life balance is oftentimes a sentiment expressed, but not entertained in an organisation, a buzz-phrase, to indicate to employees the organisation's good intentions. Without active effort and direct emphasis being placed on the work-life balance practices of the organisation and without specific programmes and policies being put into place to address the concerns employees have around the perceived lack of work-life balance, the attitude towards insufficiency of balance between work and life among the IT professionals will remain.

In addition to work-life balance, the themes 'appropriate financial reward' and 'access to the most up-to-date tools and technology' were also highlighted as very important in the retention of IT professionals. The research also concluded that traditional retentions benefits, such as the provision of healthcare benefits and job security, were of varying importance to IT professionals in their turnover intentions. One of the traditional variables that are of high importance to the IT professional is that of the provision of pension/provident funding. This variable came through strongly in both this research, as well as the research based on the reanalysis of the Gaylard (2004) data, which is an indication of its longstanding importance. The option to acquire shares in the organisation for which the IT professional works is the least important variable of all, which is consistent with previous research.

The statistical analysis conducted as part of this study in order to determine which variables influencing the IT professionals' decisions to remain with an organisation could be grouped meaningfully into themes, resulted in the identification of the following six themes, listed in order of importance:

- Traditional employment provisions;
- Inspiring, supportive, learning culture;
- Constructive teamwork;

- Liberating, enabling and rewarding personal work experience;
- Freedom to Determine Personal and Organisational Destiny; and
- Adequate provision to enable optimal performance.

Contrary to what was expected based on the literature and previous studies, by far the theme considered most important by the IT professionals responding to this survey was that of ‘traditional employment provisions’. This may be due to the relatively high importance of the provision of pension/provident funding, as well as healthcare funding, which are both important in the current South African context. The relative importance of the pension/provident provision variable, both in 2004 and today, may be due to the relative poverty in which many retirees live today. This eventuality may be foremost in many people’s minds, resulting in improved financial planning processes while they are still employed. Additionally, much emphasis is placed these days on the need to be financially secure in retirement, and this is possibly having an effect on IT professionals and the required variables influencing their retention and possible turnover intentions.

The second most important theme, namely ‘inspiring, supportive, learning culture’, also stood out relatively high above the rest of the themes. In both the current and reanalysed Gaylard (2004) six-factor solutions, this theme, ‘culture/environment’, was deemed very important to IT professionals in their retention decisions; both of these factor solutions had this theme as the second most important theme. High potential IT professionals thrive in environments where autonomy is valued; yet they also need to be able to offer their opinions and provide input that is valued by their peers and superiors. IT professionals require exposure to the most up to date technologies, so that they can experiment, be creative and try new things. It is therefore important that they be allowed to be innovative without fearing failure or recrimination. They should also be encouraged to learn continuously and be supported in their training requirements, as the rate of technological change is phenomenal and IT departments cannot afford to get behind in this exponential change curve.

The theme considered the least important was ‘adequate provision to enable optimal performance’. In the six-factor solution executed on the data from this

research, this theme came through as the lowest in importance in retaining the IT professional and was very much contrary to the other findings, and the expectations. This was unexpected due to the fact that the most important variable loading into this factor was work-life balance, which was the most important variable identified in this study in the influence of IT professionals' retention decisions, and this factor showed indications of being the least important factor to IT professionals in their retention attitudes.

This study also investigated the possible link between certain demographic variables mined from the sample and an IT professional's intention to leave the organisation. The moderately inverse relationship between job satisfaction and intent to leave was expected and was consistent with the finding of Gaylard (2004) eight years ago. The relationship identified in this specific research, between an IT professional's race and their intention to leave, was unexpected.

The final aspect of this study involved identifying the most significant 'gaps' recognised by the respondents, between what they felt was important in the retention of IT professionals, and what they experienced in terms of retention in their current organisation. Of critical importance to organisations employing IT professionals is the finding that the IT professionals surveyed in this study are of the opinion that 'balance' and 'fair and commensurate reward' are not being addressed adequately by the employers. This is particularly concerning due to the fact that these two variables were highlighted in the findings related to Research Proposition 1 as being the most important in the IT professional's turnover decision. In addition, insufficient provision is being made for 'social interaction' and 'fun' in the work place.

This study was limited to respondents working for organisations in the financial services sector in the Gauteng province and made use of a convenience sample. This study can therefore not legitimately be generalised to other populations, occupational contexts or regions. Furthermore, given the exploratory nature of the research design, this study yielded no statements about cause. The observed associations between the variables have therefore been interpreted rather than established. Notwithstanding these limitations, there are still numerous lessons for

other organisations employing IT professionals in South Africa. Indeed, the fact that many of the same findings were made in the Gaylard (2004) study as those that have been found in this study would lead one to believe that there is a consistent set of themes in retention factors associated with IT professionals. Irrespective of the period in which a similar study is conducted, many of the same themes come across consistently.

The conclusions reinforce many of the known retention factors that influence IT professionals, as well as highlighting some interesting unexpected outcomes.

6.3 Recommendations

This study identified three major stakeholders in this research in the introduction to this report: HR practitioners who are tasked with implementing strategies to retain critical IT resources; managers of IT professionals who are responsible for the enhancing the job satisfaction and commitment of IT professionals; and IT professionals themselves in understanding their own attitudes towards retention and turnover. Recommendations based on the conclusions drawn from this research are made to all three of these stakeholders, as well as an additional category of stakeholder, namely ‘educators at schools and tertiary institutions who are responsible for engaging and training young, aspirant IT professionals’.

6.3.1 *Recommendations to HR practitioners*

The study guides the HR practitioners in their duties to implement strategies to retain employees through raising levels of organisational commitment. It also offers an indication to HR practitioners as to which retention practices are obsolete, and which may provide them with some new ideas and strategies in the fight for retention.

In this fight for retention of critical, scarce IT human resources, the HR practitioner should:

- Establish a process within the organisation to reduce turnover; this includes, but is not limited to the definition of specific work-life balance practices, procedures and policies. These need to be policed among the managers of IT professionals to ensure that they are being adhered to in order to aid in retention;
- Define the organisation's value proposition(s) for the IT professionals; that (those) which prospective and current employees can get only and uniquely from the organisation in question;
- Ensure competent IT project managers are in place to run all of the IT projects. Ensure that they are properly trained and qualified and that mentoring is in place for those newly-appointed or promoted;
- Ensure that IT managers are at a sufficiently high level in the organisation so that they can dispute and comment appropriately when unattainable requirements and time-lines are dictated;
- Confirm that organisational performance appraisal processes are followed to the good of the employee and are not just treated as a bi-annual check-box action;
- Create career options to enable technical resources such as IT professionals to progress just as management resources would;
- Guarantee that remuneration practices are in line with the rest of the industry, and if not, take steps to rectify the discrepancies;
- Ensure that fair, performance-based reward systems are put in place;
- Ensure that recruitment and promotion processes are fair and transparent; and that employees are fully aware of what is required of them in order to progress to the next level; and
- Act as intermediary and spokesperson for the IT professional in organisation-wide discussions on and provisions for specific organisational benefits, such as healthcare benefits and pension/provident funding.

Through this study, the following variables have been identified as those that are deemed important to IT professionals, but are not currently satisfied in the organisations in which the respondents to this survey are currently employed. These statements should therefore be analysed seriously and addressed by HR practitioners and senior management in attempts to retain IT professionals.

- Having a competitive market-related remuneration package;
- Having my financial package structured so as to minimise my tax obligation; and
- Receiving medical aid benefits.

6.3.2 *Recommendations to managers of IT professionals*

This study in its entirety provides a guide to managers of IT professionals on the precursors to voluntary turnover among their staff in an attempt to identify the signs of turnover intent and address these in time to retain their scarce, skilled staff.

In particular, the following recommendations are made to the managers of IT professionals:

- Manage the IT professional's expectations in terms of the provision of acceptable work-life balance to avoid physical conditions such as burnout, and ensure that they take sufficient time off in order to recharge;
- Reward and recognise outstanding performance regularly and publicly;
- Manage change in the department such that IT professionals do not feel threatened or insecure;
- Ensure that employees who are high performers are not unwittingly or unwillingly promoted into management positions when they would rather remain in technical career growth streams;

- Ensure that employees are fully aware of what is required of them in order to progress to the next level, and make sure that through open and honest bi-directional communication employees are aware of their weaknesses that are preventing career progression and the actions that need to be taken to remedy or address these weaknesses;
- Ensure that through the performance appraisal and goal setting processes employees are allowed and encouraged to grow in their desired direction;
- Make provision for personal growth through appropriate training;
- Ensure that feedback and 'feedforward' sessions are held with each individual on a very regular basis and that these are not cancelled for example due to more pressing project-related issues;
- Ensure that employees are always aware of the contribution they are making and how this translates to reaching organisational goals;
- Setup regular team meetings in order to communicate appropriate organisational information, such as the attaining of organisational objectives;
- Manage employees expectations in terms of training, skill enhancement and the adequate provision of tools and access to the required technologies;
- Provide the IT professional with sufficient support in their daily tasks, but guard against micro-managing and attempt to provide the IT professional with as much autonomy as possible; and finally
- Ensure that fair, performance-based reward systems are adhered to.

Through this study, the following variables have been identified as those that are deemed important to IT professionals, but are not currently satisfied in the organisations in which the respondents to this survey are currently employed. All of these statements should therefore be analysed seriously and addressed by managers of IT professionals in attempts to retain IT professionals.

- Being financially rewarded in accordance with my contribution and performance;

- Being fairly rewarded relative to other employees, based on my experience, qualifications and performance;
- Working for a company, which identifies and looks after its high performers;
- Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due;
- Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals;
- Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways;
- Having fun on the job;
- Having a sense of security that my job is not threatened and is mine as long as I'd like it;
- Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.);
- Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training;
- Having a job that allows me to be creative and innovative; and
- Working in a culture of excellence and continuous improvement.

6.3.3 *Recommendations to educators (at schools and tertiary institutions)*

A critical problem in the IT profession currently is the serious lack of skills and the empty pipeline of new IT professionals entering the profession. In order to remedy this situation, educators (both in schools and tertiary institutions) need to market the profession in order to encourage new entrants. They need to understand the reasons for the lack of interest in the profession and take steps towards removing, or requesting the action of removing through industry support, any barriers to entry.

6.3.4 *Recommendations to IT professionals themselves*

This study also assists IT professionals in understanding themselves better in the context of their current employment relationship and assists them in making meaningful suggestions to their management to curb turnover based on their own attitudes and observations within their organisation.

Some recommendations towards IT professional self-awareness are:

- Understand the need for work-life balance and sufficient downtime. Come to an agreement with your manager on what is appropriate and what is not in terms of violating your private time. In the current era of social media and smart phones and tablets, try to avoid always answering the emails that may come through in the middle of the night, especially if you work for a global organisation operating in multiple time zones. Be sure to enforce your work-life balance agreements and guard your privacy. Private time is meant to be just that – private; work should not interrupt time away from the office;
- Understand that communication is a two-way street. If there is some aspect of your job that you are unhappy with, you need to raise this with your manager, just as you would expect them to raise any performance-related concerns with you. You need to ensure that your feedback and 'feedforward' sessions happen; you cannot just sit back and expect things to happen for you without lifting a finger; and
- Develop your own employability skills outside of the organisational context. Understand that the IT professional's destiny is in their own hands. The change of the psychological contract towards one that is career focused and no longer employer focused implies that you are in control, but with that control comes responsibility and the need to manage your own career actively.

6.4 Suggestions for further research

- This research focused on the population of IT professionals in the financial services sector. While this represents almost one fifth of the population of IT professionals in South Africa, there is still scope for a fully representative survey of all IT professionals in the country;
- The majority of the studies around employee retention focus on specific organisational sectors. Valuable insights may be gained by conducting studies in multiple sectors and comparing the results due to the fact that comparisons in research based on occupational variations are scarce;
- The sample for this research was drawn specifically from permanent employees only. IT professionals who are contractors were purposefully excluded from this study. This means that even though many IT professionals are permanently employed with IT consultancies, they were also excluded in this research. There is scope for further research into the retention strategies for contracting staff, both within their contracted organisation, as well as in their own organisation if they are permanently employed with a contracting house. Consideration also needs to be given to the development needs of the contractor, how these tie into retention, and who is responsible for these needs. There may also be the opportunity to establish any specific retention strategies that would prevent high performing independent contractors from leaving an organisation;
- This research report focused specifically on the retention factors for IT professionals and did not include the attracting or developing of these employees. These are two areas where little research has been conducted and as mentioned in this report, these are areas that can influence retention in the long-term;
- Longitudinal quantitative studies of employees from the feedback from the recruiters and the job prospect, throughout the lifecycle of employment and through to the turnover intentions and actual turnover may provide valuable information on all of these aspects;
- Valuable predictors of turnover may be obtained by conducting further research into absenteeism and IT professional turnover intentions, and

comparing these to the resulting actual turnover statistics. A longitudinal study on intended turnover and actual turnover may also lead to further insights being gained into which turnover intentions may be caught early enough so that they can be reversed, and which turnover intention variables irrevocably lead to actual turnover; these variables need to form individual studies to determine how they can be eliminated from organisations altogether. These studies should also be conducted across occupational groups, to determine where the similarities lie, so that they can be used irrespective of occupational group;

- There seem to be a lot of incidences of burnout among IT professionals and the correlation between this and turnover intentions needs to be studied, possibly in a psychological context, to determine if there are any immediate and obvious solutions to this potentially debilitating condition;
- The majority of the IT professional retention and turnover research is conducted at an organisational level. There are however, instances where IT professionals choose to exit the IT field altogether. The reasons for this need to be established and addressed, particularly if these reasons stem from issues of technostress, burnout, or other causes pertaining to human discomfort or illness;
- Research is required at the school level to determine the reasons for so few young adults entering the IT field to establish what the barriers to entry are'; and
- Finally, research is needed into the impact that social media, such as Facebook, twitter and the like, and being permanently online through email on smart phones and tablets, has on the concept of work-life balance.

REFERENCES

Accenture. (2012, 8 March). The Path Forward Retrieved 8th February, 2013, from http://www.accenture.com/SiteCollectionDocuments/PDF/Accenture-IWD-Research-Deck-2012-FINAL.pdf#zoom=50

Adelstein, J. (2008). *Discourse, dogma, and domination: knowledge work as art and politics.* Doctor of Philosophy University of Technology, Sidney. Retrieved from http://hdl.handle.net/2100/639

Albright, S. C., Winston, W. L., & Zappe, C. (2006). *Data Analysis & Decision Making with Microsoft Excel* (Third International Student ed.). Mason: Thomson South-Western.

Babiak, P., & Hare, R. D. (2006). *Snakes in Suits*. New York: HarperCollins.

Bedggood, R., & Phillips, J. (2008). The cost of commuting. *Monash Business Review, 4*(3), 32-34.

Beecham, S., Baddoo, N., Hall, T., Robinson, H., & Sharp, H. (2008). Motivation in Software Engineering: A systematic literature review. *Information and Software Technology, 50*(9-10), 860-878.

Beise, C. M. (2004, 22-24 April). *IT project management and virtual teams.* Paper presented at the Proceedings of the 2004 SIGMIS conference on Computer personnel research: Careers, culture, and ethics in a networked environment, Tucson, Arizona, USA.

Bendixen, M. T., & Sandler, M. (1995). Converting Verbal Scales to Interval Scales using Correspondence Analysis. *Management Dynamics, 4*(1), 31-49.

Berris, M., & Jackson, V. (2008). The Art of Retaining Employees. *Canadian Underwriter, 75*(4), 36-38.

Bland, J. M., & Altman, D. G. (1997). Statistics notes: Cronbach's alpha. *BMJ, 314*, 572-572.

Bohannon, S. (2008, 3 December). Who will prevail in 2009? Avoiding mistakes in an economic crisis. *Executive guidance for 2009* Retrieved 7th February, 2009, from http://www.executiveboard.com/2009guidance/pdf/Exec_Guidance_TC_Web.pdf

Buja, A., & Eyuboglu, N. (1992). Remarks on parallel analysis. *Multivariate behavioral research, 27*(4), 509-540.

Cappelli, P. (2008). A CLC Author's Call with Peter Cappelli of "Talent on Demand: Managing Talent in an Age of Uncertainty" Retrieved 8th February, 2009, from https://admin.connectpro.acrobat.com/_a747170745/p33256866/default/CLC1ADI1OZ+Peter+Cappelli+TC.pdf?download=true

Chew, J., & Chan, C. C. A. (2008). Human resource practices , organizational commitment and intention to stay. *International Journal of Manpower, 29*(6), 503-503.

Conway, J. M., & Huffcutt, A. I. (2003). A review and evaluation of exploratory factor analysis practices in organizational research. *Organizational Research Methods, 6*(2), 147-168.

Corporate Leadership Council. (2004). Driving Employee Performance and Retention Through Engagement: A Quantitative Analysis of the Effectiveness of Employee Engagement Strategies Retrieved 8th February, 2009, from https://clc.executiveboard.com/exhttph/Download/CLC_Driving_Employee_Performance_and_Retention_Through_Engagement_A_Quantitative_Anal

ysis_of_the_Effectiveness_of_Employee_Engagement_Strategies.ashx?cid=1102294&aid=6304626&fd=1

Corporate Leadership Council. (2006a). Attracting and Retaining Critical Talent Segments - Building a Competitive Employment Value Proposition Retrieved 7th February, 2009, from http://www.executiveboard.com/2009guidance/pdf/Attracting_Retaining_Critical_Talent_Segments.pdf

Corporate Leadership Council. (2006b). Attracting and Retaining Critical Talent Segments: Identifying Drivers of Attraction and Commitment in the Global Labor Market Retrieved 8th February, 2009, from https://clc.executiveboard.com/exhttph/Download/CLC_Attracting_and_Retaining_Critical_Talent_Segments_Identifying_Drivers_of_Attraction_and_Commitment_in_the_Global_Labor_Market.ashx?cid=7960815&aid=5633239&fd=1

Corporate Leadership Council. (2008a). Attracting and Retaining Critical Talent in India Retrieved 7th February, 2009, from https://clc.executiveboard.com/exhttph/Download/CLC_Attracting_and_Retaining_Critical_Talent_in_India.ashx?cid=100104404&aid=100104405&fd=1

Corporate Leadership Council. (2008b). Engage Employees for Higher Performance and Retention Retrieved 7th February, 2009, from http://www.executiveboard.com/pdf/CLC_Engage_Employees_for_Higher_Performance_and_Retention.pdf

Corporate Leadership Council. (2009). Improving Employee Performance in the Economic Downturn Retrieved 7th February, 2009, from https://clc.executiveboard.com/exhttph/Download/CLC_Improving_Employee_Performance_in_the_Economic_Downturn.ashx?cid=100109012&aid=100109013&fd=1

Deery, M. (2008). Talent management, work-life balance and retention strategies. *International Journal of Contemporary Hospitality Management, 20*(7), 792-806.

Defillippi, R. J., & Arthur, M. B. (1994). The Boundaryless Career: A Competency-Based Perspective. *Journal of Organizational Behavior, 15*(4), 307-324.

DiStefano, C., Zhu, M., & Mindrila, D. (2009). Understanding and using factor scores: Considerations for the applied researcher. *Practical Assessment, Research & Evaluation, 14*(20), 1-11.

Drucker, P. F. (1999). Knowledge-Worker Productivity: THE BIGGEST CHALLENGE. *California Management Review, 41*(2), 79-94.

Drucker, P. F. (2002). They're Not Employees, They're People. *Harvard Business Review, 80*, 70-77.

Duncan, B. (2008). *Peter Drucker: Managing organizations*. Texas A&M University – Commerce.

Eldridge, R. (2008). Conduct a proper analysis of exit data to find out why employees really leave. *People Management, 14*(4), 70-70.

Elloy, D. F., & Smith, C. R. (2003). Patterns of stress, work-family conflict, role conflict, role ambiguity and overload among dual-career and single-career couples: an Australian study. *Cross Cultural Management: An International Journal, 10*(1), 55-66.

Emerald Group Publishing Limited. (2007). Winning the battle to keep your brightest and best: Salary surveys provide like-for-like information on who earns what. *Human Resource Management International Digest, 15*(6), 31-33.

Emerald Group Publishing Limited. (2008a). A job's about passion, not just pay: Internal branding key to engaged employees. *Strategic Direction, 24*(11), 14-16.

Emerald Group Publishing Limited. (2008b). Keeping your talent - Identifying and retaining your star employees. *Strategic Direction, 24*(9), 6-8.

Ferratt, T. W., Agarwal, R., Moore, J. E., & Brown, C. V. (1999, 8-10 April). *Observations from "the front": IT executives on practices to recruit and retain information technology professionals.* Paper presented at the Proceedings of the 1999 ACM SIGCPR conference on Computer personnel research, New Orleans, Louisiana, United States.

Flood, P. C., Turner, T., Ramamoorthy, N., & Pearson, J. (2001). Causes and consequences of psychological contracts among knowledge workers in the high technology and financial services industries. *International Journal of Human Resource Management, 12*(7), 1152-1165.

Gaylard, M. A. (2004). *The Factors Influencing the Retention of Information Technology Workers.* Master of Business Administration University of the Witwatersrand, Johannesburg.

Gaylard, M. A., Sutherland, M., & Viedge, C. (2005). The factors perceived to influence the retention of information technology workers. *South African Journal of Business Management, 36*(3), 87-97.

Gifford, D. R., & Cummings, J. L. (1999). Evaluating dementia screening tests Methodologic standards to rate their performance. *Neurology, 52*(2), 224-224.

Glen, P. (2009). Panic - and How to Prevent It. *Computerworld, 43*(2), 30-30.

Gliem, J. A., & Gliem, R. R. (2003, 8-10 October). *Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales.* Paper presented at the 2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education, Columbus, Ohio, USA.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report, 8*(4), 597-607.

Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A Meta-Analysis of Antecedents and Correlates of Employee Turnover: Update, Moderator Tests, and Research Implications for the Next Millennium. *Journal of Management, 26*(3), 463-488.

Hamel, G. (2009). Moon Shots for Management. [Article]. *Harvard Business Review, 87*(2), 91-98.

Hanke, J. E., & Reitsch, A. G. (1994). Chapter 19 - Nonparametric Statistics *Understanding Business Statistics* (Fifth ed., pp. 889-911). Burr Ridge: Irwin.

Harpaz, I. (2002). Advantages and disadvantages of telecommuting for the individual, organization and society. *Work Study, 51*(2/3), 74-80.

Harris, L. (2012, 22 October). Mind the ICT skills gap Retrieved 14th November, 2012, from http://www.itweb.co.za/index.php?option=com_content&view=article&id=59439:mind-the-ict-skills-gap&catid=116&Itemid=81

Hayton, J. C., Allen, D. G., & Scarpello, V. (2004). Factor retention decisions in exploratory factor analysis: A tutorial on parallel analysis. *Organizational Research Methods, 7*(2), 191-205.

Herriot, P., Manning, W. E. G., & Kidd, J. M. (1997). The Content of the Psychological Contract. *British Journal of Management, 8*(2), 151-162.

Institute of Management & Administration. (2008a). Compensation best retention tool. *Report on Salary Surveys, 8*(6), 8-8.

Institute of Management & Administration. (2008b). Ideas to Keep Your Best Employees, Despite the Economy. *HR Focus, 85*(12), 13-14.

Institute of Management & Administration. (2009a). Does the Recession Mean Fewer Workers Will Look for New Jobs. *HR Focus, 86*(1), 7.

Institute of Management & Administration. (2009b). Employer and Company Brands May Help Competition for Top Talent. *HR Focus, 86*(2), 9-9.

Institute of Management & Administration. (2009c). How Companies Are Adjusting Pay Because of the Economy. *HR Focus, 86*(2), 3-4.

Institute of Management & Administration. (2009d). HR Strategies to Cope with the Economy. (cover story). *HR Focus, 86*(1), 1-9.

ITWeb. (2008, 17 September). ICT skills shortage shock Retrieved 14th November, 2012, from http://www.itweb.co.za/sections/business/2008/0809171100.asp?S=Training%20and%20e-Learning&A=ELR&O=google

Josefek, R., & Kauffman, R. (2003). IT Human Capital and the Information Systems Professional's Decision to Leave the Company: Working Paper, Marshall School of Business, University of Southern California.

Kinnear, L. (1999). *Determinants of Organisational Commitment amongst Knowledge Workers.* Master of Management University of the Witwatersrand, Johannesburg.

Kirby, A. (2005). Sense of fun keeps staff at Thomson Directories: Turnover of sales employees falls from 50 percent to 30 percent. *Human Resource Management International Digest, 13*(7), 31-33.

Labovitz, S. (1970). The assignment of numbers to rank order categories. *American Sociological Review*, 515-524.

Lamb, M., & Sutherland, M. (2010). The components of career capital for knowledge workers in the global economy. *The International Journal of Human Resource Management, 21*(3), 295-312.

Lanigan, K. (2008). Retaining People Practical Strategies To Reduce Staff Turnover. *Accountancy Ireland, 40*(1), 48-50.

Lee, K. S. (2008). A Look at the Job Market in 2008. *Certification Magazine, 10,* 8-8.

Lee, T. W., Mitchell, T. R., Holtom, B. C., McDaneil, L. S., & Hill, J. W. (1999). The unfolding model of voluntary turnover: A replication and extension. *Academy of Management Journal, 42*(4), 450-462.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical Research - Planning and Design* (Eighth ed.). Upper Saddle River: Pearson Merrill Prentice Hall.

Lind, D. A., Marchal, W. G., & Wathen, S. A. (2006). Chapter 15 - Chi-Square Applications *Basic Statistics for Business & Economics* (Fifth ed., pp. 464-481). Singapore: McGraw-Hill.

Lockwood, D., & Ansari, A. (1999). Recruiting and retaining scarce information technology talent: a focus group study. *Industrial Management & Data Systems, 99*(6), 251-256.

Loogma, K., Umarik, M., & Vilu, R. (2004). Identification-flexibility dilemma of IT specialists. *Career Development International, 9*(3), 323-348.

Luftman, J. (2008). Companies Can't Afford to Lose Their Best IT Pros. *Computerworld,* 37-37.

Mano-Negrin, R. (1998). Occupational determinants of work attitudes and organizational attachment. *Health Manpower Management, 24*(4), 153-160.

March, J. G., & Simon, H. A. (1958). *Organizations*. New York: Wiley.

Maurer, T., & Lippstreu, M. (2008). Who will be committed to an organization that provides support for employee development? *Journal of Management Development, 27*(3), 328-328.

Mawson, N. (2012, 14 May). Gender diversity lacking in IT Retrieved 14th November, 2012, from http://www.itweb.co.za/index.php?option=com_content&view=article&id=54809:gender-diversity-lacking-in-it&catid=69

McCulloch, M. C., & Turban, D. B. (2007). Using Person-Organization Fit to Select Employees for High-Turnover Jobs. *International Journal of Selection & Assessment, 15*(1), 63-71.

Morgan, J., Campione, W., & Jerrell, M. (2004). Wages and voluntary labor turnover: comparing it workers with other professionals. *Journal of Economics and Economic Education Research, 5*(1), 99-126.

Muja, N., & Appelbaum, S. H. (2012). Cognitive and affective processes underlying career change. *Career Development International, 17*(7), 583-601.

Niederman, F., Sumner, M., & Maertz, C. P., Jr. (2006, 13-15 April). *An analysis and synthesis of research related to turnover among IT personnel.* Paper presented at the Proceedings of the 2006 ACM SIGMIS CPR conference on computer personnel research: Forty four years of computer personnel research: achievements, challenges & the future, Pomona, California, USA.

O'Neil, L. (2009). HR Resolutions for a Happier New Year. *HRMagazine, 54*(1), 8-8.

Palan, R., & Berhad, S. M. R. T. (2007). Does employee training lead to attrition? *Performance Improvement, 46*(4), 5-8.

Rethinam, G., & Ismail, M. (2008). Constructs of Quality of Work Life: A Perspective of Information and Technology Professionals. *European Journal of Social Sciences, 7*(1), 58-70.

Rhodes, D., & Stelter, D. (2009). Seize Advantage in a Downturn. (cover story). *Harvard Business Review, 87*(2), 50-58.

Salanova, M., Llorens, S., & Cifre, E. (2012). The dark side of technologies: Technostress among users of information and communication technologies. *International Journal of Psychology*, 1-15.

Sanjay, A. (2006, 29 June). Retention in the IT industry The PROJECT PERFECT White Paper Collection. Retrieved 7th February, 2013, from http://www.projectperfect.com.au/downloads/Info/info_it_recruitment_2.pdf

Schofield, A. (2010). 2010 ITWeb-JCSE Skills Survey. Johannesburg: Joburg Centre for Software Engineering.

Schofield, A. (2011). 2011 JCSE-ITWeb Skills Survey. Johannesburg: Joburg Centre for Software Engineering.

Scholarios, D., Van der Heijden, B. I. J. M., Van der Schoot, E., Bozionelos, N., Epitropaki, O., Jedrzejowicz, P., . . . Van der Heijde, C. M. (2008). Employability and the psychological contract in European ICT sector SMEs. *The International Journal of Human Resource Management, 19*(6), 1035-1055.

Sethi, V., King, R. C., & Quick, J. C. (2004). What causes stress in information system professionals? *Communications of the ACM, 47*(3), 99-102.

Shem, K. C. (2008). *More than a Matter of Money: Strategies to Retain Generation Y Employees in Community-Based Nonprofits.* Master of Public Administration University of North Carolina Chapel Hill

Shropshire, J., & Kadlec, C. (2012). I'm Leaving the IT Field: the Impact of Stress, Job Insecurity, and Burnout on IT Professionals. *International Journal of Information, 2*(1), 6-16.

Smith, D. C., & Speight, H. L. (2006, 13-15 April). *Antecedents of turnover intention and actual turnover among information systems personnel in South Africa.* Paper presented at the Proceedings of the 2006 ACM SIGMIS CPR conference on computer personnel research: Forty four years of computer personnel research: achievements, challenges & the future, Pomona, California, USA.

Stacey, A. G. (2005). The reliability and validity of the item means and standard deviations of ordinal level response data. *Management Dynamics, 14*(3), 2-25.

Stahl, G. K., Chua, C. H., Caligiuri, P., Cerdin, J.-L., & Taniguchi, M. (2009). Predictors of turnover intentions in learning-driven and demand-driven international assignments: The role of repatriation concerns, satisfaction with company support, and perceived career advancement opportunities. *Human Resource Management, 48*(1), 89-109.

Statistics South Africa. (2012). Census 2011 Statistical release – P0301.4 (pp. 1-82). Pretoria: Statistics South Africa.

Sull, D. (2009). How to Thrive in Turbulent Markets. *Harvard Business Review, 87*(2), 78-88.

Sumner, M. (2008, 3-5 April). *An investigation of work family conflict among IT professionals.* Paper presented at the Proceedings of the 2008 ACM SIGMIS CPR conference on Computer personnel doctoral consortium and research, Charlottesville, Virginia, USA.

Tapia, A. H., & Kvasny, L. (2004, 22-24 April). *Recruitment is never enough: retention of women and minorities in the IT workplace.* Paper presented at the Proceedings of the 2004 SIGMIS conference on Computer personnel research: Careers, culture, and ethics in a networked environment, Tucson, Arizona, USA.

Trevor, C., Gerhart, B., & Boudreau, J. (1997). Voluntary turnover and job performance: Curvilinearity and the moderating influences of salary growth and promotions. *Journal of Applied Psychology, 82*(1), 44-61.

Van Vianen, A. E. M. (2000). Person-organization fit: The match between newcomers' and recruiters' preferences for organizational cultures. *Personnel Psychology, 53*(1), 113-149.

Vardaman, J. M., Allen, D. G., Renn, R. W., & Moffitt, K. R. (2008). Should I stay or should I go? The role of risk in employee turnover decisions. *Human Relations, 61*(11), 1531.

Welman, C., Kruger, F., & Mitchell, B. (2005). *Research Methodology* (Third ed.). Cape Town: Oxford University Press.

Wickham, M., & Fishwick, S. (2008). Presenting a “career-life balance” approach to the work-life balance issue. *International Review of Business Research Papers, 4*(5), 87-96.

Winterboer, T. (2012). PwC 15th Annual Global CEO Survey – Financial Services sector summary. *The Southern Africa Financial Services Journal*(February 2012), 5-9.

Wöcke, A., & Heymann, M. (2012). Impact of demographic variables on voluntary labour turnover in South Africa. *The International Journal of Human Resource Management, 23*(16), 3479-3494.

Wöcke, A., & Sutherland, M. (2008). The impact of employment equity regulations on psychological contracts in South Africa. *The International Journal of Human Resource Management, 19*(4), 528-542.

Yeo, R. K., & Li, J. (2011). Working out the quality of work life: A career development perspective with insights for human resource management. *Human Resource Management International Digest, 19*(3), 39-45.

APPENDIX A

Covering letter to respondents

Dear Information Technology Professional,

Retention factors influencing South African IT Professionals in the financial services sector

The questionnaire in this link *[SurveyLink]* forms part of the research which I am currently conducting towards my Masters of Business Administration (MBA) at the University of the Witwatersrand Business School. If you are a ***permanent employee*** with the financial services company you are currently with, this survey is for you. The research has been designed to gain insight into what makes Information Technology professionals want to stay with, or leave their organisation. The sample includes IT professionals in the financial services sector.

For the purposes of this research an IT professional is defined as an employee with specialist IT knowledge and who is involved in acquisition, processing, storage of vocal, pictorial, textual and numerical information which demands extensive use of IT skills and who is engaged daily in one or more of the following practices:

- IT strategy;
- IT hardware systems;
- IT software systems;
- IT infrastructure;
- IT project management;
- IT processes; or
- IT-related business processes.

The aim of the research is to get your views on what would influence your decision to stay or leave an organisation. It also aims to establish the practices South African organisations are applying which may affect the retention of their IT professionals.

Since demographic factors influence retention trends in South Africa, the questionnaire does ask that you indicate, among other factors, your race, gender and age.

Neither you nor your organisation will be identified in the questionnaire which should take 15 - 25 minutes to complete. I would appreciate it if you would complete and submit the questionnaire online as soon as possible, but preferably before the 15th of February 2012. Your assistance in the research effort is greatly appreciated.

Should you or your organisation wish to receive a copy of the completed research, please contact me using any of the details below.

Yours sincerely,

Glenda Shepperson

Contact details:

Work Telephone: 011-529 1021 Fax: 011-529 5648

Mobile Telephone: 082 378 3497 E-Mail: Glenda.Shepperson@students.wits.ac.za or Glenda.s@mweb.co.za

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.

[RemoveLink]

APPENDIX B

Research instrument – finalised questionnaire

Table 61: Finalised questionnaire

Retention factors influencing South African IT professionals in the financial services sector								
Section 1								
Demographic Questions – please indicate your answer by selecting the appropriate option.								
1.1.	Company (select your current employer)	1LifeDirect ABSA Bank Clientele Life Discovery Group Life Discovery Insure Discovery Invest Discovery Life First National Bank Investec Liberty Life Momentum Nedbank Outsurance PruProtect RMB Standard Bank						
	Your current employer is not included in the above list (please specify)							
1.2.	Race	Black		White		Asian		Coloured	
1.3.	Gender	Male				Female			
1.4.	Age	18-30		31-40		41-50		> 50	
1.5.	Number of Employees in my organisation	1-100		101-500		501-1000		> 1000	
1.6.	Years of service with current organisation	< 1 year		1-5 years		5-10 years		> 10 years	

1.7.	Highest University or equivalent qualification obtained	Bachelors / Diploma		Honours		Masters		PhD				
	Other qualification (please specify)											
1.8.	Current level of expertise	Entry level		Seasoned		Expert						

Section 2

Voluntary-turnover Questions – please indicate your answer by selecting the appropriate radio button (〇) for each of the 2 questions posed for every statement listed.

2.1.	Having a manager who really cares for me as a human being.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		〇	〇	〇	〇	〇	〇	〇	〇	〇	〇	〇
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		〇	〇	〇	〇	〇	〇	〇	〇	〇	〇	〇
		0	1	2	3	4	5	6	7	8	9	10
2.2.	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		〇	〇	〇	〇	〇	〇	〇	〇	〇	〇	〇
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		〇	〇	〇	〇	〇	〇	〇	〇	〇	〇	〇
		0	1	2	3	4	5	6	7	8	9	10
2.3.	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		〇	〇	〇	〇	〇	〇	〇	〇	〇	〇	〇
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		〇	〇	〇	〇	〇	〇	〇	〇	〇	〇	〇
		0	1	2	3	4	5	6	7	8	9	10
2.4.	Being able to do project work.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		〇	〇	〇	〇	〇	〇	〇	〇	〇	〇	〇
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		〇	〇	〇	〇	〇	〇	〇	〇	〇	〇	〇

		0	1	2	3	4	5	6	7	8	9	10
2.5.	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.6.	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.7.	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.8.	Having a competent manager.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.9.	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.10.	Having a good working relationship with my colleagues.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.11.	Working for a company which identifies and looks after its high performers.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.12.	Having a clear understanding of what is expected of me.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.13.	Having a competitive market-related remuneration package.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.14.	Being given share options in the company.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.15.	Seeing strong decision-making by those in authority within the organisation.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.16.	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.17.	Being part of a pension or provident scheme.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.18.	Being in an environment which encourages use of initiative without fear of punishment or failure.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.19.	Having a sense of loyalty to remain with and continue to serve the organisation.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.20.	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.21.	Having a job which allows me to be creative and innovative.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.22.	Knowing that my skills and experience are sufficient for the job at hand.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.23.	Being financially rewarded in accordance with my contribution and performance.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.24.	Having open and honest two-way communication channels with my direct manager.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.25.	Having opportunities to obtain global exposure and experience.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.26.	Having a well-designed and adhered to performance appraisal system.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.27.	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.28.	Working in teams.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.29.	Having flexible work hours.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.30.	Having a good balance between my work and home life.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.31.	Receiving medical aid benefits.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.32.	Having sufficient leave and the ability to exercise it when most suitable to me.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.33.	Having my financial package structured so as to minimise my tax obligation.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.34.	Having the freedom and time to interact socially with other employees at work.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.35.	Having an empowering and constructive working relationship with my direct manager.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.36.	Receiving clear and frequent communications on strategy, goals and plans.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.37.	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.38.	Having the ability to change careers within the same organisation.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.39.	Working in a culture of excellence and continuous improvement.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.40.	Having fun on the job.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.41.	Working in an ever-changing environment.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.42.	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.43.	Being able to positively influence peoples' lives and "make a difference".	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.44.	Having someone in the workplace who encourages my progress and development.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.45.	Working in an organisation which has clear and sound governance over its core activities.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.46.	Having the opportunity to do what I do best, every day.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.47.	Having a close colleague or good friend at work.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.48.	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
2.49.	Being able to influence the kind of work that gets assigned to me.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**									
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

2.50.	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	***How important is this variable in my decision to remain with my current company?*** (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10
		To what degree is this variable satisfied at my current company? (0 means **not at all** and 10 means **completely)**										
		○	○	○	○	○	○	○	○	○	○	○
		0	1	2	3	4	5	6	7	8	9	10

Section 3									
Your Current Outlook – please rate your current levels of:									
3.1.	Job satisfaction			Low		Medium		High	
3.2.	Intention to leave (do you have any specific intention to leave your current organisation) – within the next:	1 year		1-2 years		2-3 years		Not in the foresee-able future	

Section 4	
Open-ended Questions	
Are there any additional variables, not listed above, that may influence your decision to stay with your current organisation? If so, please list them below:	
4.1.	
4.2.	
4.3.	
4.4.	
4.5.	

APPENDIX C

Ranked variables according to mean for the first set of statements: variables that influence respondents' decision to remain with the current organisation

Table 62: First set of statements analysed using Stacey's (2005) distribution fitting approach

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
1	30	Having a good balance between my work and home life.	0.5037	0.8803	9.2096	0.0000
2	13	Having a competitive market-related remuneration package.	0.4857	0.8730	8.9529	0.0000
3	48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	0.4262	0.8709	7.8756	0.0000
4	23	Being financially rewarded in accordance with my contribution and performance.	0.3968	0.9047	7.0588	0.0000
5	24	Having open and honest two-way communication channels with my direct manager.	0.3915	0.8081	7.7977	0.0000
6	29	Having flexible work hours.	0.3719	0.9281	6.4488	0.0000
7	32	Having sufficient leave and the ability to exercise it when most suitable to me.	0.3492	0.9821	5.7226	0.0000
8	50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	0.3434	0.9456	5.8441	0.0000
9	8	Having a competent manager.	0.3329	0.8598	6.2310	0.0000
10	12	Having a clear understanding of what is expected of me.	0.2427	0.7307	5.3442	0.0000
11	46	Having the opportunity to do what I do best, every day.	0.2163	0.7540	4.6169	0.0000
12	7	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	0.2118	0.9381	3.6340	0.0003

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
13	11	Working for a company which identifies and looks after its high performers.	0.2084	0.8370	4.0073	0.0001
14	18	Being in an environment which encourages use of initiative without fear of punishment or failure.	0.2054	0.8329	3.9692	0.0001
15	39	Working in a culture of excellence and continuous improvement.	0.1827	0.8079	3.6401	0.0003
16	27	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	0.1704	0.8775	3.1255	0.0020
17	22	Knowing that my skills and experience are sufficient for the job at hand.	0.1533	0.8894	2.7735	0.0060
18	35	Having an empowering and constructive working relationship with my direct manager.	0.1530	0.7749	3.1778	0.0017
19	21	Having a job which allows me to be creative and innovative.	0.1420	0.8519	2.6823	0.0078
20	37	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	0.1355	0.8393	2.5985	0.0099
21	9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	0.1317	0.7816	2.7117	0.0071
22	17	Being part of a pension or provident scheme.	0.1126	1.4664	1.2360	0.2176
23	20	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	0.1045	0.8506	1.9777	0.0490
24	10	Having a good working relationship with my colleagues.	0.0849	0.7803	1.7501	0.0813
25	33	Having my financial package structured so as to minimise my tax obligation.	0.0841	1.0922	1.2395	0.2163
26	5	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	0.0273	1.0684	0.4116	0.6809
27	40	Having fun on the job.	0.0195	0.8823	0.3565	0.7217
28	31	Receiving medical aid benefits.	0.0117	1.3688	0.1377	0.8906

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
29	16	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	-0.0146	0.9723	-0.2420	0.8090
30	36	Receiving clear and frequent communications on strategy, goals and plans.	-0.0332	0.8653	-0.6176	0.5374
31	44	Having someone in the workplace who encourages my progress and development.	-0.0623	1.0270	-0.9762	0.3299
32	45	Working in an organisation which has clear and sound governance over its core activities.	-0.0813	0.8851	-1.4791	0.1403
33	26	Having a well-designed and adhered to performance appraisal system.	-0.0992	1.1305	-1.4117	0.1592
34	49	Being able to influence the kind of work that gets assigned to me.	-0.1132	0.8959	-2.0330	0.0431
35	15	Seeing strong decision-making by those in authority within the organisation.	-0.1189	0.8016	-2.3869	0.0177
36	42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	-0.1256	1.0089	-2.0037	0.0462
37	1	Having a manager who really cares for me as a human being.	-0.1487	0.9316	-2.5691	0.0108
38	19	Having a sense of loyalty to remain with and continue to serve the organisation.	-0.1953	0.9855	-3.1894	0.0016
39	38	Having the ability to change careers within the same organisation.	-0.1992	1.0737	-2.9859	0.0031
40	43	Being able to positively influence peoples' lives and "make a difference".	-0.2031	0.9829	-3.3260	0.0010
41	6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	-0.2226	1.0036	-3.5699	0.0004
42	3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	-0.3029	0.9437	-5.1649	0.0000
43	4	Being able to do project work.	-0.3087	0.8954	-5.5476	0.0000
44	25	Having opportunities to obtain global exposure and experience.	-0.3109	1.0374	-4.8228	0.0000

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
45	28	Working in teams.	-0.4624	1.0346	-7.1935	0.0000
46	34	Having the freedom and time to interact socially with other employees at work.	-0.5288	0.9999	-8.5110	0.0000
47	41	Working in an ever-changing environment.	-0.6307	0.8605	-11.7957	0.0000
48	47	Having a close colleague or good friend at work.	-0.6353	1.0508	-9.7301	0.0000
49	2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	-0.6795	0.9074	-12.0528	0.0000
50	14	Being given share options in the company.	-0.7228	1.2641	-9.2023	0.0000

The Chi^2 p-value across all of the fifty “importance” questions is 0.9887.

Table 63: Gaylard's (2004) first set of statements reanalysed using Stacey's (2005) distribution fitting approach

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
1	30	Having a good balance between my work and home life.	0.6081	0.9463	9.9342	0.0000
2	48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	0.4326	1.0086	6.6312	0.0000
3	24	Having open and honest two-way communication channels with my direct manager.	0.3910	0.8824	6.8513	0.0000
4	10	Having a good working relationship with my colleagues.	0.3858	0.7103	8.3962	0.0000
5	50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	0.3638	0.8056	6.9821	0.0000
6	23	Being financially rewarded in accordance with my contribution and performance.	0.3583	0.7805	7.0967	0.0000
7	13	Having a competitive market-related remuneration package.	0.3476	0.8580	6.2629	0.0000
8	9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	0.3023	0.6924	6.7496	0.0000
9	8	Having a competent manager.	0.2951	0.8821	5.1721	0.0000
10	12	Having a clear understanding of what is expected of me.	0.2310	0.8181	4.3648	0.0000
11	32	Having sufficient leave and the ability to exercise it when most suitable to me.	0.2292	1.0424	3.3996	0.0008
12	18	Being in an environment which encourages use of initiative without fear of punishment or failure.	0.2143	0.7771	4.2636	0.0000
13	27	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	0.2090	0.7925	4.0766	0.0001
14	17	Being part of a pension or provident scheme.	0.1969	1.3348	2.2804	0.0235
15	29	Having flexible work hours.	0.1933	1.0450	2.8593	0.0046
16	7	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	0.1921	0.9964	2.9812	0.0032

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
17	21	Having a job which allows me to be creative and innovative.	0.1443	0.8777	2.5419	0.0117
18	5	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	0.1400	1.1427	1.8943	0.0594
19	37	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	0.1378	0.7525	2.8318	0.0050
20	11	Working for a company which identifies and looks after its high performers.	0.1205	0.9602	1.9403	0.0535
21	16	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	0.1175	0.9712	1.8698	0.0627
22	39	Working in a culture of excellence and continuous improvement.	0.1032	0.7631	2.0911	0.0376
23	22	Knowing that my skills and experience are sufficient for the job at hand.	0.0903	0.8245	1.6939	0.0916
24	35	Having an empowering and constructive working relationship with my direct manager.	0.0766	0.7626	1.5539	0.1215
25	46	Having the opportunity to do what I do best, every day.	0.0627	0.9640	1.0055	0.3157
26	1	Having a manager who really cares for me as a human being.	0.0558	0.8490	1.0156	0.3108
27	20	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	0.0510	0.7695	1.0241	0.3068
28	40	Having fun on the job.	0.0230	0.8750	0.4059	0.6852
29	19	Having a sense of loyalty to remain with and continue to serve the organisation.	0.0176	0.9437	0.2876	0.7739
30	15	Seeing strong decision-making by those in authority within the organisation.	-0.0471	0.9028	-0.8069	0.4206
31	44	Having someone in the workplace who encourages my progress and development.	-0.0519	0.8675	-0.9255	0.3556
32	33	Having my financial package structured so as to minimise my tax obligation.	-0.0550	1.3145	-0.6463	0.5187
33	49	Being able to influence the kind of work that gets assigned to me.	-0.0660	0.8241	-1.2384	0.2168

Rank	Statement number	Statements that influence retention decisions	Mean	StDev	t-value	p-value
34	36	Receiving clear and frequent communications on strategy, goals and plans.	-0.1600	0.8898	-2.7802	0.0059
35	38	Having the ability to change careers within the same organisation.	-0.1728	0.9794	-2.7277	0.0069
36	25	Having opportunities to obtain global exposure and experience.	-0.2018	1.0249	-3.0444	0.0026
37	26	Having a well-designed and adhered to performance appraisal system.	-0.2171	1.1110	-3.0205	0.0028
38	45	Working in an organisation which has clear and sound governance over its core activities.	-0.2257	0.9751	-3.5784	0.0004
39	28	Working in teams.	-0.2265	0.8887	-3.9397	0.0001
40	42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	-0.2287	1.1289	-3.1317	0.0020
41	43	Being able to positively influence peoples' lives and "make a difference".	-0.2412	0.9281	-4.0184	0.0001
42	3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	-0.2445	0.9166	-4.1244	0.0001
43	6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	-0.2701	0.9800	-4.2612	0.0000
44	2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	-0.2824	0.9604	-4.5454	0.0000
45	4	Being able to do project work.	-0.3687	1.0206	-5.5842	0.0000
46	31	Receiving medical aid benefits.	-0.4127	1.3565	-4.7033	0.0000
47	41	Working in an ever-changing environment.	-0.5270	0.8287	-9.8312	0.0000
48	34	Having the freedom and time to interact socially with other employees at work.	-0.5711	1.0058	-8.7773	0.0000
49	47	Having a close colleague or good friend at work.	-0.7189	1.1681	-9.5145	0.0000
50	14	Being given share options in the company.	-0.8016	1.1804	-10.4983	0.0000

The Chi^2 p-value across all of the Gaylard (2004) reanalysed fifty "importance" questions is 1.0000.

APPENDIX D

Comparison of statement means and rankings between the current research and the reanalysed Gaylard (2004) results for the first set of statements

Table 64: Comparison of ranked means (current research versus Gaylard (2004)) – Variables that influence respondents' retention decision

Statement number	Statements that influence retention decisions	Ranking	Mean	Gaylard ranking	Gaylard mean
1	Having a manager who really cares for me as a human being.	37	-0.1487	26	0.0558
2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	49	-0.6795	44	-0.2824
3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	42	-0.3029	42	-0.2445
4	Being able to do project work.	43	-0.3087	45	-0.3687
5	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	26	0.0273	18	0.1400
6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	41	-0.2226	43	-0.2701
7	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	12	0.2118	16	0.1921
8	Having a competent manager.	9	0.3329	9	0.2951
9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	21	0.1317	8	0.3023
10	Having a good working relationship with my colleagues.	24	0.0849	4	0.3858
11	Working for a company which identifies and looks after its high performers.	13	0.2084	20	0.1205
12	Having a clear understanding of what is expected of me.	10	0.2427	10	0.2310
13	Having a competitive market-related remuneration package.	2	0.4857	7	0.3476
14	Being given share options in the company.	50	-0.7228	50	-0.8016
15	Seeing strong decision-making by	35	-0.1189	30	-0.0471

Statement number	Statements that influence retention decisions	Ranking	Mean	Gaylard ranking	Gaylard mean
	those in authority within the organisation.				
16	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	29	-0.0146	21	0.1175
17	Being part of a pension or provident scheme.	22	0.1126	14	0.1969
18	Being in an environment which encourages use of initiative without fear of punishment or failure.	14	0.2054	12	0.2143
19	Having a sense of loyalty to remain with and continue to serve the organisation.	38	-0.1953	29	0.0176
20	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	23	0.1045	27	0.0510
21	Having a job which allows me to be creative and innovative.	19	0.1420	17	0.1443
22	Knowing that my skills and experience are sufficient for the job at hand.	17	0.1533	23	0.0903
23	Being financially rewarded in accordance with my contribution and performance.	4	0.3968	6	0.3583
24	Having open and honest two-way communication channels with my direct manager.	5	0.3915	3	0.3910
25	Having opportunities to obtain global exposure and experience.	44	-0.3109	36	-0.2018
26	Having a well-designed and adhered to performance appraisal system.	33	-0.0992	37	-0.2171
27	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	16	0.1704	13	0.2090
28	Working in teams.	45	-0.4624	39	-0.2265
29	Having flexible work hours.	6	0.3719	15	0.1933
30	Having a good balance between my work and home life.	1	0.5037	1	0.6081
31	Receiving medical aid benefits.	28	0.0117	46	-0.4127
32	Having sufficient leave and the ability to exercise it when most suitable to me.	7	0.3492	11	0.2292
33	Having my financial package structured so as to minimise my tax obligation.	25	0.0841	32	-0.0550
34	Having the freedom and time to interact socially with other	46	-0.5288	48	-0.5711

Statement number	Statements that influence retention decisions	Ranking	Mean	Gaylard ranking	Gaylard mean
	employees at work.				
35	Having an empowering and constructive working relationship with my direct manager.	18	0.1530	24	0.0766
36	Receiving clear and frequent communications on strategy, goals and plans.	30	-0.0332	34	-0.1600
37	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	20	0.1355	19	0.1378
38	Having the ability to change careers within the same organisation.	39	-0.1992	35	-0.1728
39	Working in a culture of excellence and continuous improvement.	15	0.1827	22	0.1032
40	Having fun on the job.	27	0.0195	28	0.0230
41	Working in an ever-changing environment.	47	-0.6307	47	-0.5270
42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	36	-0.1256	40	-0.2287
43	Being able to positively influence peoples' lives and "make a difference".	40	-0.2031	41	-0.2412
44	Having someone in the workplace who encourages my progress and development.	31	-0.0623	31	-0.0519
45	Working in an organisation which has clear and sound governance over its core activities.	32	-0.0813	38	-0.2257
46	Having the opportunity to do what I do best, every day.	11	0.2163	25	0.0627
47	Having a close colleague or good friend at work.	48	-0.6353	49	-0.7189
48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	3	0.4262	2	0.4326
49	Being able to influence the kind of work that gets assigned to me.	34	-0.1132	33	-0.0660
50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	8	0.3434	5	0.3638

The Chi^2 p-values across all of the fifty "importance" questions are 0.9887 (current research) and 1.0000 (Gaylard, 2004).

APPENDIX E

Initial factor analysis

Table 65: Principal axis factoring – total variance explained for the initial solution

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	19.286	38.571	38.571	18.898	37.795	37.795	6.245	12.490	12.490
2	2.726	5.452	44.023	2.326	4.651	42.447	4.131	8.262	20.752
3	2.153	4.306	48.330	1.699	3.398	45.845	4.042	8.084	28.836
4	1.651	3.303	51.632	1.237	2.475	48.320	3.158	6.316	35.151
5	1.631	3.263	54.895	1.203	2.406	50.726	2.948	5.897	41.048
6	1.333	2.666	57.561	.939	1.878	52.603	2.591	5.181	46.229
7	1.282	2.563	60.124	.885	1.770	54.374	1.847	3.695	49.924
8	1.203	2.405	62.529	.743	1.486	55.860	1.726	3.453	53.377
9	1.108	2.215	64.745	.702	1.405	57.265	1.264	2.528	55.905
10	1.052	2.104	66.849	.572	1.144	58.409	1.252	2.504	58.409
11	.983	1.965	68.814						
12	.946	1.891	70.706						
13	.847	1.695	72.400						
14	.791	1.582	73.983						
15	.747	1.494	75.476						
16	.708	1.416	76.893						
17	.675	1.350	78.243						
18	.650	1.301	79.543						
19	.633	1.265	80.809						
20	.590	1.179	81.988						
21	.553	1.105	83.093						
22	.528	1.056	84.149						
23	.512	1.023	85.173						
24	.490	.981	86.153						
25	.471	.942	87.096						
26	.434	.868	87.963						
27	.425	.850	88.814						
28	.415	.830	89.644						
29	.367	.734	90.378						

30	.359	.718	91.096						
31	.339	.677	91.773						
32	.334	.668	92.442						
33	.333	.666	93.108						
34	.317	.633	93.741						
35	.305	.610	94.351						
36	.293	.586	94.937						
37	.263	.525	95.462						
38	.260	.520	95.982						
39	.243	.486	96.468						
40	.223	.446	96.913						
41	.206	.412	97.325						
42	.194	.389	97.714						
43	.188	.376	98.090						
44	.177	.353	98.443						
45	.160	.320	98.763						
46	.150	.300	99.064						
47	.137	.275	99.339						
48	.125	.249	99.588						
49	.108	.215	99.803						
50	.098	.197	100.000						

Extraction Method: Principal Axis Factoring.

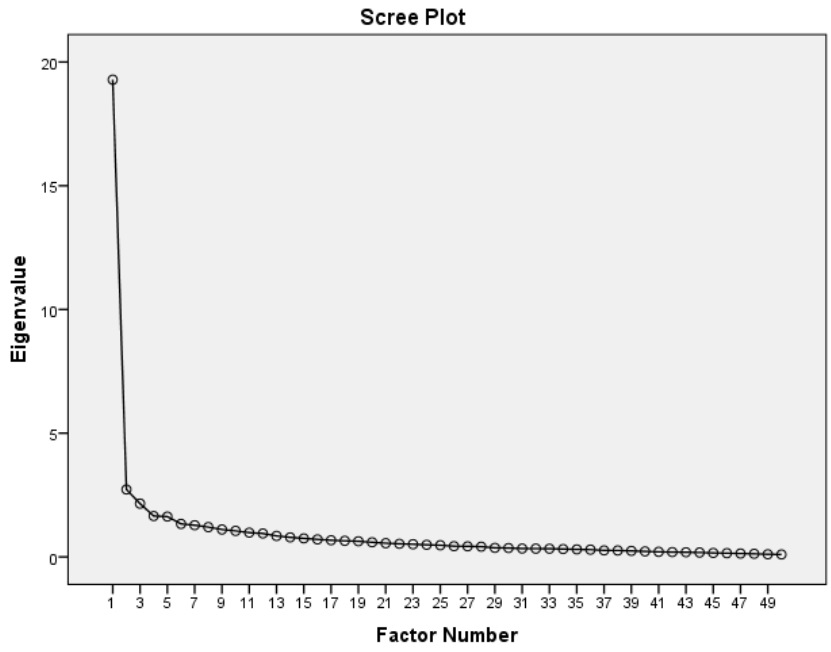


Figure 25: Principal axis factoring – Scree plot for the initial solution

APPENDIX F

Parallel analysis

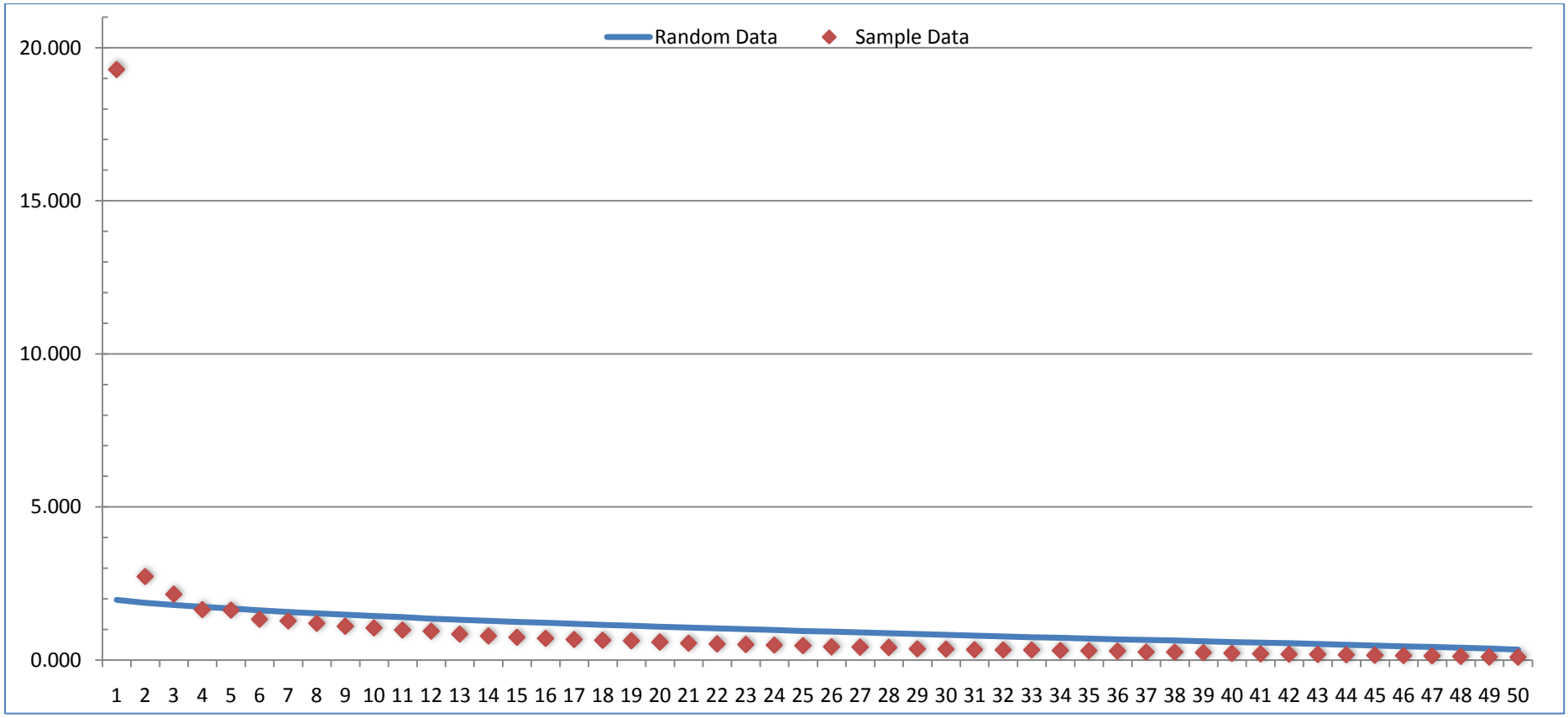


Figure 26: Parallel analysis - Plot of actual versus randomly generated eigenvalues

APPENDIX G

Three-factor solution – total variance explained

Table 66: Principal axis factoring – total variance explained for the 3-factor solution

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	19.286	38.571	38.571	18.769	37.538	37.538	10.378	20.757	20.757
2	2.726	5.452	44.023	2.189	4.379	41.917	7.287	14.573	35.330
3	2.153	4.306	48.330	1.577	3.155	45.072	4.871	9.742	45.072
4	1.651	3.303	51.632						
5	1.631	3.263	54.895						
6	1.333	2.666	57.561						
7	1.282	2.563	60.124						
8	1.203	2.405	62.529						
9	1.108	2.215	64.745						
10	1.052	2.104	66.849						
11	.983	1.965	68.814						
12	.946	1.891	70.706						
13	.847	1.695	72.400						
14	.791	1.582	73.983						
15	.747	1.494	75.476						
16	.708	1.416	76.893						
17	.675	1.350	78.243						
18	.650	1.301	79.543						
19	.633	1.265	80.809						
20	.590	1.179	81.988						
21	.553	1.105	83.093						
22	.528	1.056	84.149						
23	.512	1.023	85.173						
24	.490	.981	86.153						
25	.471	.942	87.096						
26	.434	.868	87.963						
27	.425	.850	88.814						
28	.415	.830	89.644						

29	.367	.734	90.378						
30	.359	.718	91.096						
31	.339	.677	91.773						
32	.334	.668	92.442						
33	.333	.666	93.108						
34	.317	.633	93.741						
35	.305	.610	94.351						
36	.293	.586	94.937						
37	.263	.525	95.462						
38	.260	.520	95.982						
39	.243	.486	96.468						
40	.223	.446	96.913						
41	.206	.412	97.325						
42	.194	.389	97.714						
43	.188	.376	98.090						
44	.177	.353	98.443						
45	.160	.320	98.763						
46	.150	.300	99.064						
47	.137	.275	99.339						
48	.125	.249	99.588						
49	.108	.215	99.803						
50	.098	.197	100.000						

Extraction Method: Principal Axis Factoring.

APPENDIX H

Three-factor solution – factor details

Three-factor solution - Factor 1

Table 67: Factor 1 – Three-factor solution

Factor 1						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
23	0.7261	Being financially rewarded in accordance with my contribution and performance.	4	6	0.3968	0.2881
11	0.7217	Working for a company which identifies and looks after its high performers.	13	20	0.2084	0.1504
13	0.7050	Having a competitive market-related remuneration package.	2	7	0.4857	0.3424
50	0.6868	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	8	5	0.3434	0.2358
39	0.6484	Working in a culture of excellence and continuous improvement.	15	22	0.1827	0.1185
24	0.6477	Having open and honest two-way communication channels with my direct manager.	5	3	0.3915	0.2536
46	0.6321	Having the opportunity to do what I do best, every day.	11	25	0.2163	0.1367
20	0.6314	Having a clear understanding of my goals, and why they	23	27	0.1045	0.0660

Factor 1						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
		are important in ensuring the success of the organisation.				
37	0.6261	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	20	19	0.1355	0.0848
12	0.6163	Having a clear understanding of what is expected of me.	10	10	0.2427	0.1495
8	0.6099	Having a competent manager.	9	9	0.3329	0.2030
35	0.6019	Having an empowering and constructive working relationship with my direct manager.	18	24	0.1530	0.0921
48	0.5994	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	3	2	0.4262	0.2555
18	0.5981	Being in an environment which encourages use of initiative without fear of punishment or failure.	14	12	0.2054	0.1229
7	0.5856	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	12	16	0.2118	0.1241
9	0.5702	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	21	8	0.1317	0.0751
22	0.5079	Knowing that my skills and experience are sufficient for the	17	23	0.1533	0.0778

Factor 1						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
		job at hand.				
10	0.5029	Having a good working relationship with my colleagues.	24	4	0.0849	0.0427
21	0.4862	Having a job which allows me to be creative and innovative.	19	17	0.1420	0.0690
45	0.4740	Working in an organisation which has clear and sound governance over its core activities.	32	38	-0.0813	0.0386
16	0.4652	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	29	21	-0.0146	0.0068
27	0.4628	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	16	13	0.1704	0.0789
15	0.4513	Seeing strong decision-making by those in authority within the organisation.	35	30	-0.1189	0.0537
36	0.4453	Receiving clear and frequent communications on strategy, goals and plans.	30	34	-0.0332	0.0148
30	0.4302	Having a good balance between my work and home life.	1	1	0.5037	0.2167
1	0.4249	Having a manager who really cares for me as a human being.	37	26	-0.1487	0.0632
6	0.4141	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	41	43	-0.2226	0.0922

Factor 1						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
29	0.4138	Having flexible work hours.	6	15	0.3719	0.1539
Sum	**15.6852**					**3.6067**
Weighted average of the statement means for the entire Factor 1						**4.3489**

Three-factor solution - Factor 2

Table 68: Factor 2 – Three-factor solution

Factor 2						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
41	0.6489	Working in an ever-changing environment.	47	47	-0.6307	0.4093
16	0.6116	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	29	21	-0.0146	0.0089
25	0.5974	Having opportunities to obtain global exposure and experience.	44	36	-0.3109	0.1857
26	0.5655	Having a well-designed and adhered to performance appraisal system.	33	37	-0.0992	0.0561
43	0.5425	Being able to positively influence peoples' lives and "make a difference".	40	41	-0.2031	0.1102
38	0.5303	Having the ability to change careers within the same organisation.	39	35	-0.1992	0.1056

Factor 2						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
14	0.5289	Being given share options in the company.	50	50	-0.7228	0.3823
45	0.5185	Working in an organisation which has clear and sound governance over its core activities.	32	38	-0.0813	0.0422
36	0.5074	Receiving clear and frequent communications on strategy, goals and plans.	30	34	-0.0332	0.0168
15	0.4892	Seeing strong decision-making by those in authority within the organisation.	35	30	-0.1189	0.0582
49	0.4764	Being able to influence the kind of work that gets assigned to me.	34	33	-0.1132	0.0539
34	0.4698	Having the freedom and time to interact socially with other employees at work.	46	48	-0.5288	0.2484
20	0.4673	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	23	27	0.1045	0.0488
17	0.4606	Being part of a pension or provident scheme.	22	14	0.1126	0.0519
31	0.4419	Receiving medical aid benefits.	28	46	0.0117	0.0052
42	0.4349	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	36	40	-0.1256	0.0546
33	0.4342	Having my financial package structured so as to minimise my tax obligation.	25	32	0.0841	0.0365

Factor 2						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
27	0.4283	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	16	13	0.1704	0.0730
6	0.4250	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	41	43	-0.2226	0.0946
44	0.4235	Having someone in the workplace who encourages my progress and development.	31	31	-0.0623	0.0264
47	0.4231	Having a close colleague or good friend at work.	48	49	-0.6353	0.2688
37	0.4126	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	20	19	0.1355	0.0559
Sum	**10.8378**					**2.3934**
Weighted average of the statement means for the entire Factor 2						**4.5282**

Three-factor solution - Factor 3

Table 69: Factor 3 – Three-factor solution

Factor 3						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
31	0.5895	Receiving medical aid benefits.	28	46	0.0117	0.0069
17	0.5698	Being part of a pension or provident	22	14	0.1126	0.0642

Factor 3						
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**	**Stmt mean**	**Weighted average of means (absolute) of each stmt**
		scheme.				
32	0.5654	Having sufficient leave and the ability to exercise it when most suitable to me.	7	11	0.3492	0.1975
5	0.5322	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	26	18	0.0273	0.0145
33	0.5237	Having my financial package structured so as to minimise my tax obligation.	25	32	0.0841	0.0441
44	0.4751	Having someone in the workplace who encourages my progress and development.	31	31	-0.0623	0.0296
3	0.4632	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	42	42	-0.3029	0.1403
30	0.4356	Having a good balance between my work and home life.	1	1	0.5037	0.2195
2	0.4260	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	49	44	-0.6795	0.2895
8	0.4192	Having a competent manager.	9	9	0.3329	0.1396
34	0.4037	Having the freedom and time to interact socially with other employees at work.	46	48	-0.5288	0.2135
Sum	**5.4034**					**1.3590**
Weighted average of the statement means for the entire Factor 3						**3.9761**

APPENDIX I

Six-factor solution – total variance explained

Table 70: Principal axis factoring – total variance explained for the 6-factor solution

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	19.286	38.571	38.571	18.834	37.669	37.669	6.534	13.069	13.069
2	2.726	5.452	44.023	2.269	4.538	42.206	4.969	9.937	23.006
3	2.153	4.306	48.330	1.639	3.279	45.485	4.313	8.626	31.632
4	1.651	3.303	51.632	1.179	2.357	47.842	3.680	7.359	38.991
5	1.631	3.263	54.895	1.134	2.268	50.111	3.566	7.132	46.123
6	1.333	2.666	57.561	.885	1.769	51.880	2.878	5.757	51.880
7	1.282	2.563	60.124						
8	1.203	2.405	62.529						
9	1.108	2.215	64.745						
10	1.052	2.104	66.849						
11	.983	1.965	68.814						
12	.946	1.891	70.706						
13	.847	1.695	72.400						
14	.791	1.582	73.983						
15	.747	1.494	75.476						
16	.708	1.416	76.893						
17	.675	1.350	78.243						
18	.650	1.301	79.543						
19	.633	1.265	80.809						
20	.590	1.179	81.988						
21	.553	1.105	83.093						
22	.528	1.056	84.149						
23	.512	1.023	85.173						
24	.490	.981	86.153						
25	.471	.942	87.096						
26	.434	.868	87.963						
27	.425	.850	88.814						
28	.415	.830	89.644						
29	.367	.734	90.378						

30	.359	.718	91.096						
31	.339	.677	91.773						
32	.334	.668	92.442						
33	.333	.666	93.108						
34	.317	.633	93.741						
35	.305	.610	94.351						
36	.293	.586	94.937						
37	.263	.525	95.462						
38	.260	.520	95.982						
39	.243	.486	96.468						
40	.223	.446	96.913						
41	.206	.412	97.325						
42	.194	.389	97.714						
43	.188	.376	98.090						
44	.177	.353	98.443						
45	.160	.320	98.763						
46	.150	.300	99.064						
47	.137	.275	99.339						
48	.125	.249	99.588						
49	.108	.215	99.803						
50	.098	.197	100.000						

Extraction Method: Principal Axis Factoring.

APPENDIX J

Six-factor solution – factor details

Six-factor solution - Factor 1

Table 71: Factor 1 – Six-factor solution

Factor 1						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
23	0.7556	Being financially rewarded in accordance with my contribution and performance.	4	6	0.3968	0.2998
13	0.7142	Having a competitive market-related remuneration package.	2	7	0.4857	0.3468
50	0.7110	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	8	5	0.3434	0.2441
11	0.6765	Working for a company which identifies and looks after its high performers.	13	20	0.2084	0.1410
24	0.5782	Having open and honest two-way communication channels with my direct manager.	5	3	0.3915	0.2264
7	0.5224	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	12	16	0.2118	0.1107
8	0.5158	Having a competent manager.	9	9	0.3329	0.1717
18	0.4831	Being in an	14	12	0.2054	0.0992

Factor 1						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
		environment which encourages use of initiative without fear of punishment or failure.				
15	0.4789	Seeing strong decision-making by those in authority within the organisation.	35	30	-0.1189	0.0569
35	0.4593	Having an empowering and constructive working relationship with my direct manager.	18	24	0.1530	0.0703
12	0.4548	Having a clear understanding of what is expected of me.	10	10	0.2427	0.1103
37	0.4448	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	20	19	0.1355	0.0603
20	0.4253	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	23	27	0.1045	0.0444
39	0.4236	Working in a culture of excellence and continuous improvement.	15	22	0.1827	0.0774
9	0.4097	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	21	8	0.1317	0.0540

Factor 1						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
48	0.4085	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	3	2	0.4262	0.1741
Sum	**8.4615**					**2.2875**
Weighted average of the statement means for the entire Factor 1						**3.6990**

Gaylard's original factor 1 (Gaylard, 2004, pp. 93-94)

Table 72: Factor 1 – Gaylard's original six-factor solution (2004, pp. 93-94)

Factor 1			
Statement number	Loading	Statement	Ranked importance
24	-0.6233	Having open and honest two-way communication channels with my direct manager.	3
6	-0.5983	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	43
36	-0.5745	Receiving clear and frequent communications on strategy, goals and plans.	33
19	-0.5324	Having a sense of loyalty to remain with and continue to serve the organisation.	26
45	-0.4984	Working in an organisation which has clear and sound governance over its core activities.	38
26	-0.4912	Having a well-designed and adhered to performance appraisal system.	41
11	-0.49	Working for a company which identifies and looks after its high performers.	20
35	-0.4874	Having an empowering and constructive working relationship with my direct manager.	17
20	-0.4827	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	22
37	-0.4581	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	13

Six-factor solution - Factor 2

Table 73: Factor 2 – Six-factor solution

Factor 2						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
41	0.6119	Working in an ever-changing environment.	47	47	-0.6307	0.3859
34	0.5882	Having the freedom and time to interact socially with other employees at work.	46	48	-0.5288	0.3110
47	0.5486	Having a close colleague or good friend at work.	48	49	-0.6353	0.3486
43	0.5070	Being able to positively influence peoples' lives and "make a difference".	40	41	-0.2031	0.1030
49	0.5049	Being able to influence the kind of work that gets assigned to me.	34	33	-0.1132	0.0571
14	0.5041	Being given share options in the company.	50	50	-0.7228	0.3643
40	0.4669	Having fun on the job.	27	28	0.0195	0.0091
45	0.4608	Working in an organisation which has clear and sound governance over its core activities.	32	38	-0.0813	0.0375
15	0.4431	Seeing strong decision-making by those in authority within the organisation.	35	30	-0.1189	0.0527
42	0.4343	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	36	40	-0.1256	0.0546
16	0.4343	Having available a wide variety of training programmes	29	21	-0.0146	0.0063

Factor 2						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
		and being supported and encouraged to improve my skills through training.				
38	0.4292	Having the ability to change careers within the same organisation.	39	35	-0.1992	0.0855
Sum	**5.9333**					**1.8156**
Weighted average of the statement means for the entire Factor 2						**3.2679**

Gaylard's Original Factor 2 (Gaylard, 2004, p. 95)

Table 74: Factor 2 – Gaylard's original six-factor solution (2004, p. 95)

Factor 2			
Statement number	Loading	Statement	Ranked importance
17	-0.6587	Being part of a pension or provident scheme.	31
31	-0.6581	Receiving medical aid benefits.	47
14	-0.5672	Being given share options in the company.	50
32	-0.513	Having sufficient leave and the ability to exercise it when most suitable to me.	14

Six-factor solution - Factor 3

Table 75: Factor 3 – Six-factor solution

Factor 3						
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**	**Stmt mean**	**Weighted average of means (absolute) of each stmt**
27	0.6861	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	16	13	0.1704	0.1169
21	0.6036	Having a job which allows me to be creative and innovative.	19	17	0.1420	0.0857
46	0.4878	Having the opportunity to do what I do best, every day.	11	25	0.2163	0.1055
20	0.4818	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	23	27	0.1045	0.0504
39	0.4789	Working in a culture of excellence and continuous improvement.	15	22	0.1827	0.0875
18	0.4649	Being in an environment which encourages use of initiative without fear of punishment or failure.	14	12	0.2054	0.0955
26	0.4216	Having a well-designed and adhered to performance appraisal system.	33	37	-0.0992	0.0418
25	0.4205	Having opportunities to obtain global exposure and experience.	44	36	-0.3109	0.1307
37	0.4167	Having my inputs, opinions and the work that I produce duly considered, praised and	20	19	0.1355	0.0565

Factor 3						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
		rewarded where due.				
16	0.4016	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	29	21	-0.0146	0.0059
Sum	**4.8634**					**0.7764**
Weighted average of the statement means for the entire Factor 3						**6.2643**

Gaylard's Original Factor 3 (Gaylard, 2004, p. 96)

Table 76: Factor 3 – Gaylard's original six-factor solution (2004, p. 96)

Factor 3			
Statement number	Loading	Statement	Ranked importance
30	-0.6306	Having a good balance between my work and home life.	1
50	-0.6135	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	6
23	-0.5877	Being financially rewarded in accordance with my contribution and performance.	4
10	-0.5855	Having a good working relationship with my colleagues.	2
13	-0.5676	Having a competitive market-related remuneration package.	5
12	-0.5644	Having a clear understanding of what is expected of me.	10
46	-0.5447	Having the opportunity to do what I do best, every day.	27
8	-0.5367	Having a competent manager.	9
22	-0.5025	Knowing that my skills and experience are sufficient for the job at hand.	19
48	-0.4916	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	8
2	-0.4813	Having a job which does not contain too many overly stressful, tedious or less than satisfactory	42

Factor 3			
Statement number	Loading	Statement	Ranked importance
		elements.	
1	-0.476	Having a manager who really cares for me as a human being.	24
24	-0.4641	Having open and honest two-way communication channels with my direct manager.	3
37	-0.4627	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	13
5	-0.4598	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	28
32	-0.4545	Having sufficient leave and the ability to exercise it when most suitable to me.	14

Six-factor solution - Factor 4

Table 77: Factor 4 – Six-factor solution

Factor 4						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
17	0.6891	Being part of a pension or provident scheme.	22	14	0.1126	0.0776
31	0.6806	Receiving medical aid benefits.	28	46	0.0117	0.0080
33	0.6406	Having my financial package structured so as to minimise my tax obligation.	25	32	0.0841	0.0539
32	0.5376	Having sufficient leave and the ability to exercise it when most suitable to me.	7	11	0.3492	0.1877

Factor 4						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
5	0.4933	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	26	18	0.0273	0.0135
Sum	**3.0411**					**0.3407**
Weighted average of the statement means for the entire Factor 4						**8.9264**

Gaylard's Original Factor 4 (Gaylard, 2004, p. 98)

Table 78: Factor 4 – Gaylard's original six-factor solution (2004, p. 98)

Factor 4			
Statement number	Loading	Statement	Ranked importance
47	-0.6202	Having a close colleague or good friend at work.	49
34	-0.5221	Having the freedom and time to interact socially with other employees at work.	48
40	-0.5217	Having fun on the job.	25
41	-0.5049	Working in an ever-changing environment.	46

Six-factor solution - Factor 5

Table 79: Factor 5 – Six-factor solution

Factor 5						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
10	0.5613	Having a good working relationship with my colleagues.	24	4	0.0849	0.0476
6	0.5331	Having a clearly articulated corporate	41	43	-0.2226	0.1187

Factor 5						
Statement number	Loading	Statement	Ranking	Gaylard (2004) ranking	Stmt mean	Weighted average of means (absolute) of each stmt
		vision, goals and plans on how to achieve these goals.				
8	0.5168	Having a competent manager.	9	9	0.3329	0.1721
28	0.4689	Working in teams.	45	39	-0.4624	0.2169
Sum	**2.0802**					**0.5552**
Weighted average of the statement means for the entire Factor 5						**3.7467**

Gaylard's Original Factor 5 (Gaylard, 2004, p. 99)

Table 80: Factor 5 – Gaylard's original six-factor solution (2004, p. 99)

Factor 5			
Statement number	Loading	Statement	Ranked importance
7	-0.7264	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	18
25	-0.5251	Having opportunities to obtain global exposure and experience.	39
6	-0.4653	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	43
38	-0.4602	Having the ability to change careers within the same organisation.	36

Six-factor solution - Factor 6

Table 81: Factor 6 – Six-factor solution

Factor 6						
Statement number	**Loading**	**Statement**	**Ranking**	**Gaylard (2004) ranking**	**Stmt mean**	**Weighted average of means (absolute) of each stmt**
30	0.5048	Having a good balance between my work and home life.	1	1	0.5037	0.2543
29	0.4641	Having flexible work hours.	6	15	0.3719	0.1726
32	0.4259	Having sufficient leave and the ability to exercise it when most suitable to me.	7	11	0.3492	0.1487
46	0.4221	Having the opportunity to do what I do best, every day.	11	25	0.2163	0.0913
48	0.4189	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	3	2	0.4262	0.1785
3	0.4092	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	42	42	-0.3029	0.1239
Sum	**2.6449**					**0.9694**
Weighted Average of the Statement Means for the entire Factor 6						**2.7285**

Gaylard's Original Factor 6 (Gaylard, 2004, p. 100)

Table 82: Factor 6 – Gaylard's original six-factor solution (2004, p. 100)

Factor 6			
Statement number	Loading	Statement	Ranked importance
18	-0.5688	Being in an environment which encourages use of initiative without fear of punishment or failure.	11
21	-0.5684	Having a job which allows me to be creative and innovative.	15
9	-0.4751	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	7
39	-0.4608	Working in a culture of excellence and continuous improvement.	16
27	-0.4607	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	12

APPENDIX K

Gaylard's (2004) six-factor solution reanalysed – total variance explained

Table 83: Principal axis factoring – total variance explained for Gaylard's (2004) reanalysed 6-factor solution

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	19.989	39.978	39.978	19.533	39.066	39.066	7.292	14.583	14.583
2	2.565	5.129	45.107	2.091	4.182	43.249	5.230	10.460	25.044
3	2.157	4.315	49.422	1.677	3.355	46.604	4.022	8.044	33.088
4	1.561	3.122	52.544	1.085	2.171	48.774	3.604	7.207	40.295
5	1.459	2.918	55.462	.956	1.913	50.687	3.225	6.450	46.746
6	1.247	2.494	57.955	.762	1.524	52.211	2.733	5.465	52.211
7	1.203	2.406	60.361						
8	1.110	2.219	62.580						
9	1.028	2.057	64.637						
10	.949	1.897	66.534						
11	.913	1.826	68.361						
12	.845	1.690	70.051						
13	.836	1.672	71.723						
14	.794	1.589	73.312						
15	.747	1.493	74.805						
16	.697	1.394	76.199						
17	.666	1.333	77.532						
18	.654	1.308	78.840						
19	.614	1.228	80.068						
20	.585	1.170	81.238						
21	.555	1.110	82.347						
22	.528	1.056	83.403						
23	.514	1.028	84.431						
24	.486	.972	85.403						
25	.460	.920	86.323						
26	.452	.904	87.227						
27	.424	.849	88.075						

28	.415	.830	88.906						
29	.412	.823	89.729						
30	.389	.777	90.506						
31	.361	.722	91.228						
32	.348	.696	91.924						
33	.336	.673	92.596						
34	.325	.651	93.247						
35	.317	.635	93.882						
36	.299	.597	94.479						
37	.284	.568	95.047						
38	.274	.548	95.595						
39	.246	.493	96.088						
40	.228	.456	96.544						
41	.224	.449	96.993						
42	.212	.425	97.418						
43	.193	.386	97.804						
44	.188	.375	98.179						
45	.173	.347	98.526						
46	.170	.340	98.866						
47	.162	.323	99.189						
48	.147	.295	99.484						
49	.136	.273	99.757						
50	.122	.243	100.000						

Extraction Method: Principal Axis Factoring.

APPENDIX L

Gaylard's (2004) six-factor solution reanalysed – factor details

Gaylard's (2004) Reanalysed Factor 1

Table 84: Factor 1 – Gaylard's (2004) reanalysed 6-factor solution

Factor 1						
Statement number	Loading	Statement	Gaylard ranking	Ranking	Gaylard statement mean	Weighted average of means (absolute) of each stmt
30	0.6364	Having a good balance between my work and home life.	1	1	0.6081	0.3870
50	0.6203	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	5	8	0.3638	0.2257
23	0.5931	Being financially rewarded in accordance with my contribution and performance.	6	4	0.3583	0.2125
10	0.5869	Having a good working relationship with my colleagues.	4	24	0.3858	0.2264
12	0.5718	Having a clear understanding of what is expected of me.	10	10	0.2310	0.1321
13	0.5685	Having a competitive market-related remuneration package.	7	2	0.3476	0.1976
46	0.5521	Having the opportunity to do what I do best, every day.	25	11	0.0627	0.0346
8	0.5414	Having a competent manager.	9	9	0.2951	0.1598
22	0.5076	Knowing that my skills and experience are sufficient for the job at hand.	23	17	0.0903	0.0459
48	0.5001	Having the right tools to do my job well (PCs, hardware, software applications,	2	3	0.4326	0.2164

Factor 1						
Statement number	Loading	Statement	Gaylard ranking	Ranking	Gaylard statement mean	Weighted average of means (absolute) of each stmt
		accessories etc.)				
2	0.4749	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	44	49	-0.2824	0.1341
1	0.4722	Having a manager who really cares for me as a human being.	26	37	0.0558	0.0263
37	0.4705	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	19	20	0.1378	0.0649
24	0.4684	Having open and honest two-way communication channels with my direct manager.	3	5	0.3910	0.1832
32	0.4595	Having sufficient leave and the ability to exercise it when most suitable to me.	11	7	0.2292	0.1053
5	0.4581	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	18	26	0.1400	0.0641
35	0.4563	Having an empowering and constructive working relationship with my direct manager.	24	18	0.0766	0.0350
29	0.4497	Having flexible work hours.	15	6	0.1933	0.0869
42	0.4303	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	40	36	-0.2287	0.0984
16	0.4063	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through	21	29	0.1175	0.0477

Factor 1						
Statement number	**Loading**	**Statement**	**Gaylard ranking**	**Ranking**	**Gaylard statement mean**	**Weighted average of means (absolute) of each stmt**
		training.				
39	0.4043	Working in a culture of excellence and continuous improvement.	22	15	0.1032	0.0417
Sum	**10.6287**					**2.7255**
Weighted average of the statement means for the entire Factor 1						**3.8997**

Gaylard's (2004) Reanalysed Factor 2

Table 85: Factor 2 – Gaylard's (2004) reanalysed 6-factor solution

Factor 2						
Statement number	**Loading**	**Statement**	**Gaylard ranking**	**Ranking**	**Gaylard statement mean**	**Weighted average of means (absolute) of each stmt**
24	0.6140	Having open and honest two-way communication channels with my direct manager.	3	5	0.3910	0.2401
6	0.5971	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	43	41	-0.2701	0.1613
36	0.5709	Receiving clear and frequent communications on strategy, goals and plans.	34	30	-0.1600	0.0914
19	0.5306	Having a sense of loyalty to remain with and continue to serve the organisation.	29	38	0.0176	0.0093
45	0.4957	Working in an organisation which has clear and sound governance over its core activities.	38	32	-0.2257	0.1119

Factor 2						
Statement number	**Loading**	**Statement**	**Gaylard ranking**	**Ranking**	**Gaylard statement mean**	**Weighted average of means (absolute) of each stmt**
26	0.4895	Having a well-designed and adhered to performance appraisal system.	37	33	-0.2171	0.1063
11	0.4870	Working for a company which identifies and looks after its high performers.	20	13	0.1205	0.0587
35	0.4771	Having an empowering and constructive working relationship with my direct manager.	24	18	0.0766	0.0366
20	0.4754	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	27	23	0.0510	0.0242
37	0.4498	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	19	20	0.1378	0.0620
44	0.4240	Having someone in the workplace who encourages my progress and development.	31	31	-0.0519	0.0220
39	0.4110	Working in a culture of excellence and continuous improvement.	22	15	0.1032	0.0424
46	0.4086	Having the opportunity to do what I do best, every day.	25	11	0.0627	0.0256
Sum	**6.4307**					**0.9918**
Weighted average of the statement means for the entire Factor 2						**6.4842**

Gaylard's (2004) Reanalysed Factor 3

Table 86: Factor 3 – Gaylard's (2004) reanalysed 6-factor solution

Factor 3						
Statement number	**Loading**	**Statement**	**Gaylard ranking**	**Ranking**	**Gaylard statement mean**	**Weighted average of means (absolute) of each stmt**
7	0.7384	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	16	12	0.1921	0.1419
25	0.5305	Having opportunities to obtain global exposure and experience.	36	44	-0.2018	0.1071
6	0.4628	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	43	41	-0.2701	0.1250
38	0.4588	Having the ability to change careers within the same organisation.	35	39	-0.1728	0.0793
16	0.4390	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	21	29	0.1175	0.0516
26	0.4166	Having a well-designed and adhered to performance appraisal system.	37	33	-0.2171	0.0904
4	0.4005	Being able to do project work.	45	43	-0.3687	0.1477
Sum	**3.4467**					**0.7429**
Weighted average of the statement means for the entire Factor 3						**4.6393**

Gaylard's (2004) Reanalysed Factor 4

Table 87: Factor 4 – Gaylard's (2004) reanalysed 6-factor solution

Factor 4						
Statement number	**Loading**	**Statement**	**Gaylard ranking**	**Ranking**	**Gaylard statement mean**	**Weighted average of means (absolute) of each stmt**
21	0.5809	Having a job which allows me to be creative and innovative.	17	19	0.1443	0.0838
18	0.5771	Being in an environment which encourages use of initiative without fear of punishment or failure.	12	14	0.2143	0.1237
9	0.4788	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	8	21	0.3023	0.1447
39	0.4629	Working in a culture of excellence and continuous improvement.	22	15	0.1032	0.0478
27	0.4568	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	13	16	0.2090	0.0955
43	0.4522	Being able to positively influence peoples' lives and "make a difference".	41	40	-0.2412	0.1091
Sum	**3.0086**					**0.6046**
Weighted average of the statement means for the entire Factor 4						**4.9767**

Gaylard's (2004) Reanalysed Factor 5

Table 88: Factor 5 – Gaylard's (2004) reanalysed 6-factor solution

Factor 5						
Statement number	**Loading**	**Statement**	**Gaylard ranking**	**Ranking**	**Gaylard statement mean**	**Weighted average of means (absolute) of each stmt**
47	0.6315	Having a close colleague or good friend at work.	49	48	-0.7189	0.4540
34	0.5291	Having the freedom and time to interact socially with other employees at work.	48	46	-0.5711	0.3022
40	0.5095	Having fun on the job.	28	27	0.0230	0.0117
41	0.4985	Working in an ever-changing environment.	47	47	-0.5270	0.2627
28	0.4259	Working in teams.	39	45	-0.2265	0.0964
Sum	**2.5945**					**1.1270**
Weighted average of the statement means for the entire Factor 5						**2.3021**

Gaylard's (2004) Reanalysed Factor 6

Table 89: Factor 6 – Gaylard's (2004) reanalysed 6-factor solution

Factor 6						
Statement number	**Loading**	**Statement**	**Gaylard ranking**	**Ranking**	**Gaylard statement mean**	**Weighted average of means (absolute) of each stmt**
31	0.6537	Receiving medical aid benefits.	46	28	-0.4127	0.2698
17	0.6524	Being part of a pension or provident scheme.	14	22	0.1969	0.1285
14	0.5575	Being given share options in the company.	50	50	-0.8016	0.4469

Factor 6						
Statement number	**Loading**	**Statement**	**Gaylard ranking**	**Ranking**	**Gaylard statement mean**	**Weighted average of means (absolute) of each stmt**
32	0.5300	Having sufficient leave and the ability to exercise it when most suitable to me.	11	7	0.2292	0.1215
Sum	**2.3936**					**0.9666**
Weighted average of the statement means for the entire Factor 6						**2.4763**

APPENDIX M

Cross-tabulation and Chi^2 reports

Current employer : Intention to leave

Table 90: Cross tabulation – Current employer versus Intention to leave

Current_Employer * Intention_to_leave Crosstabulation

			Intention_to_leave				Total
			1 year	1-2 years	2-3 years	Not in the foreseeable future	
Current_Employer	ABSA Bank	Count	1	1	1	0	3
		Expected Count	.5	.6	.3	1.6	3.0
		% within Intention_to_leave	2.5%	2.0%	3.6%	0.0%	1.2%
	Discovery Group Life	Count	3	2	0	4	9
		Expected Count	1.4	1.7	1.0	4.9	9.0
		% within Intention_to_leave	7.5%	4.0%	0.0%	2.8%	3.5%
	Discovery Insure	Count	1	6	2	15	24
		Expected Count	3.7	4.6	2.6	13.1	24.0
		% within Intention_to_leave	2.5%	12.0%	7.1%	10.6%	9.3%
	Discovery Invest	Count	4	4	3	13	24
		Expected Count	3.7	4.6	2.6	13.1	24.0
		% within Intention_to_leave	10.0%	8.0%	10.7%	9.2%	9.3%
	Discovery Life	Count	21	25	16	68	130
		Expected Count	20.1	25.1	14.1	70.8	130.0
		% within Intention_to_leave	52.5%	50.0%	57.1%	48.2%	50.2%
	Investec	Count	1	1	0	4	6
		Expected Count	.9	1.2	.6	3.3	6.0
		% within Intention_to_leave	2.5%	2.0%	0.0%	2.8%	2.3%
	Liberty Life	Count	2	0	0	3	5

		Expected Count	.8	1.0	.5	2.7	5.0
		% within Intention_to_leave	5.0%	0.0%	0.0%	2.1%	1.9%
	Nedbank	Count	1	0	0	1	2
		Expected Count	.3	.4	.2	1.1	2.0
		% within Intention_to_leave	2.5%	0.0%	0.0%	0.7%	0.8%
	Other	Count	1	0	1	3	5
		Expected Count	.8	1.0	.5	2.7	5.0
		% within Intention_to_leave	2.5%	0.0%	3.6%	2.1%	1.9%
	PruProtect	Count	3	6	2	20	31
		Expected Count	4.8	6.0	3.4	16.9	31.0
		% within Intention_to_leave	7.5%	12.0%	7.1%	14.2%	12.0%
	RMB	Count	0	0	0	3	3
		Expected Count	.5	.6	.3	1.6	3.0
		% within Intention_to_leave	0.0%	0.0%	0.0%	2.1%	1.2%
	Standard Bank	Count	2	5	3	7	17
		Expected Count	2.6	3.3	1.8	9.3	17.0
		% within Intention_to_leave	5.0%	10.0%	10.7%	5.0%	6.6%
Total		Count	40	50	28	141	259
		Expected Count	40.0	50.0	28.0	141.0	259.0
		% within Intention_to_leave	100.0%	100.0%	100.0%	100.0%	100.0%

Table 91: Chi^2 tests report – Current employer versus Intention to leave

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.976[a]	33	.841
Likelihood Ratio	30.741	33	.580
N of Valid Cases	259		

a. 39 cells (81.3%) have expected count less than 5. The minimum expected count is .22.

Table 92: Cross tabulation – Current employer recoded versus Intention to leave

Current_Employer_Recoded * Intention_to_leave Crosstabulation

			Intention_to_leave				Total
			1 year	1-2 years	2-3 years	Not in the foreseeable future	
Current_Employer_Recoded	Discovery	Count	32	43	23	120	218
		Expected Count	33.7	42.1	23.6	118.7	218.0
		% within Intention_to_leave	80.0%	86.0%	82.1%	85.1%	84.2%
	Non_Discovery	Count	8	7	5	21	41
		Expected Count	6.3	7.9	4.4	22.3	41.0
		% within Intention_to_leave	20.0%	14.0%	17.9%	14.9%	15.8%
Total		Count	40	50	28	141	259
		Expected Count	40.0	50.0	28.0	141.0	259.0
		% within Intention_to_leave	100.0%	100.0%	100.0%	100.0%	100.0%

Table 93: Chi^2 tests report – Current employer recoded versus Intention to leave

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.827[a]	3	.843
Likelihood Ratio	.797	3	.850
N of Valid Cases	259		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.43.

Race : Intention to leave

Table 94: Cross tabulation – Race versus Intention to leave

Race * Intention_to_leave Crosstabulation

			Intention_to_leave				Total
			1 year	1-2 years	2-3 years	Not in the foreseeable future	
Race	Asian	Count	2	9	2	26	39
		Expected Count	6.0	7.5	4.2	21.2	39.0
		% within Intention_to_leave	5.0%	18.0%	7.1%	18.4%	15.1%
	Black	Count	17	16	11	25	69
		Expected Count	10.7	13.3	7.5	37.6	69.0
		% within Intention_to_leave	42.5%	32.0%	39.3%	17.7%	26.6%
	Coloured	Count	5	5	1	5	16
		Expected Count	2.5	3.1	1.7	8.7	16.0
		% within Intention_to_leave	12.5%	10.0%	3.6%	3.5%	6.2%
	White	Count	16	20	14	85	135
		Expected Count	20.8	26.1	14.6	73.5	135.0
		% within Intention_to_leave	40.0%	40.0%	50.0%	60.3%	52.1%
Total		Count	40	50	28	141	259
		Expected Count	40.0	50.0	28.0	141.0	259.0
		% within Intention_to_leave	100.0%	100.0%	100.0%	100.0%	100.0%

Table 95: Chi^2 tests report – Race versus Intention to leave

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.431[a]	9	.003
Likelihood Ratio	26.004	9	.002
N of Valid Cases	259		

a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is 1.73.

Table 96: Cross tabulation – Race_recoded versus Intention to leave

Race_Recoded * Intention_to_leave Crosstabulation

			Intention_to_leave				Total
			1 year	1-2 years	2-3 years	Not in the foreseeable future	
Race_Recoded	AsianOrColoured	Count	7	14	3	31	55
		Expected Count	8.5	10.6	5.9	29.9	55.0
		% within Intention_to_leave	17.5%	28.0%	10.7%	22.0%	21.2%
	Black	Count	17	16	11	25	69
		Expected Count	10.7	13.3	7.5	37.6	69.0
		% within Intention_to_leave	42.5%	32.0%	39.3%	17.7%	26.6%
	White	Count	16	20	14	85	135
		Expected Count	20.8	26.1	14.6	73.5	135.0
		% within Intention_to_leave	40.0%	40.0%	50.0%	60.3%	52.1%
Total		Count	40	50	28	141	259
		Expected Count	40.0	50.0	28.0	141.0	259.0
		% within Intention_to_leave	100.0%	100.0%	100.0%	100.0%	100.0%

Table 97: Chi^2 tests report – Race_recoded versus Intention to leave

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.398[a]	6	.008
Likelihood Ratio	17.514	6	.008
N of Valid Cases	259		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.95.

Gender : Intention to leave

Table 98: Cross tabulation – Gender versus Intention to leave

Gender * Intention_to_leave Crosstabulation

			Intention_to_leave				Total
			1 year	1-2 years	2-3 years	Not in the foreseeable future	
Gender	Female	Count	16	17	14	46	93
		Expected Count	14.4	18.0	10.1	50.6	93.0
		% within Intention_to_leave	40.0%	34.0%	50.0%	32.6%	35.9%
	Male	Count	24	33	14	95	166
		Expected Count	25.6	32.0	17.9	90.4	166.0
		% within Intention_to_leave	60.0%	66.0%	50.0%	67.4%	64.1%
Total		Count	40	50	28	141	259
		Expected Count	40.0	50.0	28.0	141.0	259.0
		% within Intention_to_leave	100.0%	100.0%	100.0%	100.0%	100.0%

Table 99: Chi^2 tests report – Gender versus Intention to leave

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.447[a]	3	.328
Likelihood Ratio	3.354	3	.340
N of Valid Cases	259		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.05.

Age recoded : Intention to leave

Table 100: Cross tabulation – Age (recoded) versus Intention to leave

Age_recoded * Intention_to_leave Crosstabulation

			Intention_to_leave				Total
			1 year	1-2 years	2-3 years	Not in the foreseeable future	
Age_recoded	30 or more years of age	Count	29	28	21	98	176
		Expected Count	27.2	34.0	19.0	95.8	176.0
		% within Intention_to_leave	72.5%	56.0%	75.0%	69.5%	68.0%
	Under 30 years of age	Count	11	22	7	43	83
		Expected Count	12.8	16.0	9.0	45.2	83.0
		% within Intention_to_leave	27.5%	44.0%	25.0%	30.5%	32.0%
Total		Count	40	50	28	141	259
		Expected Count	40.0	50.0	28.0	141.0	259.0
		% within Intention_to_leave	100.0%	100.0%	100.0%	100.0%	100.0%

Table 101: Chi^2 tests report – Age (recoded) versus Intention to leave

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.454[a]	3	.216
Likelihood Ratio	4.328	3	.228
N of Valid Cases	259		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.97.

APPENDIX N

Data recoding and Spearman's correlation reports

Age : Intention to leave

Table 102: Data recoding – Age versus Intention to leave

Age (text values)	Age (recoded)	Intention to leave (text values)	Intention to leave (recoded)
18-30	1	Not in the foreseeable future	1
31-40	2	1 year	2
41-50	3	1-2 years	3
>50	4	2-3 years	4

Table 103: Spearman correlations – Age versus Intention to leave

Correlations

			Age	Intention_to_leave
Spearman's rho	Age	Correlation Coefficient	1.000	-.066
		Sig. (2-tailed)	.	.287
		N	259	259
	Intention_to_leave	Correlation Coefficient	-.066	1.000
		Sig. (2-tailed)	.287	.
		N	259	259

Number of employees : Intention to leave

Table 104: Data recoding – Number of employees versus Intention to leave

Number of employees (text values)	Number of employees (recoded)	Intention to leave (text values)	Intention to leave (recoded)
0-500	1	Not in the foreseeable future	1
101-500	2	1 year	2
501-1000	3	1-2 years	3
>1000	4	2-3 years	4

Table 105: Spearman correlations – Number of employees versus Intention to leave

Correlations

			Number_of_employees	Intention_to_leave
Spearman's rho	Number_of_employees	Correlation Coefficient	1.000	-.020
		Sig. (2-tailed)	.	.747
		N	259	259
	Intention_to_leave	Correlation Coefficient	-.020	1.000
		Sig. (2-tailed)	.747	.
		N	259	259

Years of service : Intention to leave

Table 106: Data recoding – Years of service versus Intention to leave

Years of service (text values)	Years of service (recoded)	Intention to leave (text values)	Intention to leave (recoded)
< 1 year	1	Not in the foreseeable future	1
1-5 years	2	1 year	2
5-10 years	3	1-2 years	3
> 10 years	4	2-3 years	4

Table 107: Spearman correlations – Years of service versus Intention to leave

Correlations

			Years_of_service	Intention_to_leave
Spearman's rho	Years_of_service	Correlation Coefficient	1.000	.085
		Sig. (2-tailed)	.	.173
		N	259	259
	Intention_to_leave	Correlation Coefficient	.085	1.000
		Sig. (2-tailed)	.173	.
		N	259	259

Highest qualification : Intention to leave

Table 108: Data recoding – Highest qualification versus Intention to leave

Highest qualification (text values)	Highest qualification (recoded)	Intention to leave (text values)	Intention to leave (recoded)
Other	1	Not in the foreseeable future	1
Bachelors/Diploma	2	1 year	2
Honours	3	1-2 years	3
Masters	4	2-3 years	4
PhD	5		

Table 109: Spearman correlations – Highest qualification versus Intention to leave

Correlations

			Highest_qualification	Intention_to_leave
Spearman's rho	Highest_qualification	Correlation Coefficient	1.000	-.005
		Sig. (2-tailed)	.	.932
		N	259	259
	Intention_to_leave	Correlation Coefficient	-.005	1.000
		Sig. (2-tailed)	.932	.
		N	259	259

Level of expertise : Intention to leave

Table 110: Data recoding – Level of expertise versus Intention to leave

Level of expertise (text values)	Level of expertise (recoded)	Intention to leave (text values)	Intention to leave (recoded)
Entry level	1	Not in the foreseeable future	1
Seasoned	2	1 year	2
Expert	3	1-2 years	3
		2-3 years	4

Table 111: Spearman correlations – Level of expertise versus Intention to leave

Correlations

			Level_of_expertise	Intention_to_leave
Spearman's rho	Level_of_expertise	Correlation Coefficient	1.000	-.022
		Sig. (2-tailed)	.	.719
		N	259	259
	Intention_to_leave	Correlation Coefficient	-.022	1.000
		Sig. (2-tailed)	.719	.
		N	259	259

Job satisfaction : Intention to leave

Table 112: Data recoding – Job satisfaction versus Intention to leave

Job satisfaction (text values)	Job satisfaction (recoded)	Intention to leave (text values)	Intention to leave (recoded)
Low	1	Not in the foreseeable future	1
Medium	2	1 year	2
High	3	1-2 years	3
		2-3 years	4

Table 113: Spearman correlations – Job satisfaction versus Intention to leave

Correlations

			Job_satisfaction	Intention_to_leave
Spearman's rho	Job_satisfaction	Correlation Coefficient	1.000	-.369**
		Sig. (2-tailed)	.	.000
		N	259	259
	Intention_to_leave	Correlation Coefficient	-.369**	1.000
		Sig. (2-tailed)	.000	.
		N	259	259

**. Correlation is significant at the 0.01 level (2-tailed).

APPENDIX O

Ranked variables according to mean for the second set of statements: variables satisfied within the respondents' current organisation

Table 114: Second set of statements analysed using Stacey's (2005) distribution fitting approach

Rank	Statement number	Statements satisfied in current organisation	Mean	StDev	t-value	p-value
1	17	Being part of a pension or provident scheme.	0.8976	1.2527	11.5314	0.0000
2	48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	0.5185	0.9823	8.4947	0.0000
3	32	Having sufficient leave and the ability to exercise it when most suitable to me.	0.4446	0.9500	7.5321	0.0000
4	29	Having flexible work hours.	0.4298	0.9960	6.9440	0.0000
5	10	Having a good working relationship with my colleagues.	0.4263	0.7395	9.2778	0.0000
6	24	Having open and honest two-way communication channels with my direct manager.	0.2960	1.0558	4.5121	0.0000
7	8	Having a competent manager.	0.2911	1.0208	4.5900	0.0000
8	22	Knowing that my skills and experience are sufficient for the job at hand.	0.2293	0.8134	4.5378	0.0000
9	28	Working in teams.	0.1921	0.8750	3.5326	0.0005
10	3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	0.1514	0.8313	2.9310	0.0037
11	45	Working in an organisation which has clear and sound governance over its core activities.	0.1514	0.9062	2.6883	0.0077
12	9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	0.1477	0.8459	2.8092	0.0053
13	34	Having the freedom and time to interact socially with other employees at work.	0.1286	0.8940	2.3152	0.0214

Rank	Statement number	Statements satisfied in current organisation	Mean	StDev	t-value	p-value
14	30	Having a good balance between my work and home life.	0.1204	0.9387	2.0637	0.0401
15	35	Having an empowering and constructive working relationship with my direct manager.	0.1170	0.9604	1.9605	0.0510
16	5	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	0.1105	0.8342	2.1326	0.0339
17	39	Working in a culture of excellence and continuous improvement.	0.1093	0.8894	1.9780	0.0490
18	12	Having a clear understanding of what is expected of me.	0.0917	0.7669	1.9252	0.0553
19	4	Being able to do project work.	0.0901	0.9092	1.5946	0.1120
20	20	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	0.0697	0.8745	1.2821	0.2010
21	21	Having a job which allows me to be creative and innovative.	0.0578	0.8214	1.1317	0.2588
22	18	Being in an environment which encourages use of initiative without fear of punishment or failure.	0.0401	0.9296	0.6949	0.4877
23	46	Having the opportunity to do what I do best, every day.	0.0251	0.8672	0.4664	0.6413
24	47	Having a close colleague or good friend at work.	0.0134	0.9805	0.2204	0.8258
25	6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	0.0108	0.8149	0.2138	0.8309
26	43	Being able to positively influence peoples' lives and "make a difference".	-0.0060	0.8761	-0.1103	0.9123
27	49	Being able to influence the kind of work that gets assigned to me.	-0.0116	0.8818	-0.2114	0.8328
28	41	Working in an ever-changing environment.	-0.0151	0.8659	-0.2798	0.7799
29	19	Having a sense of loyalty to remain with and continue to serve the organisation.	-0.0190	0.8513	-0.3589	0.7200
30	11	Working for a company which identifies and looks after its high performers.	-0.0287	0.7842	-0.5880	0.5570
31	15	Seeing strong decision-making by those in authority within the organisation.	-0.0637	0.8361	-1.2253	0.2216

Rank	Statement number	Statements satisfied in current organisation	Mean	StDev	t-value	p-value
32	40	Having fun on the job.	-0.0936	0.8387	-1.7952	0.0738
33	31	Receiving medical aid benefits.	-0.0985	1.5654	-1.0123	0.3124
34	1	Having a manager who really cares for me as a human being.	-0.1082	0.9096	-1.9138	0.0568
35	33	Having my financial package structured so as to minimise my tax obligation.	-0.1133	0.9590	-1.9014	0.0584
36	13	Having a competitive market-related remuneration package.	-0.1188	0.8037	-2.3789	0.0181
37	7	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	-0.1270	0.9844	-2.0759	0.0389
38	27	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	-0.1407	0.9945	-2.2762	0.0237
39	36	Receiving clear and frequent communications on strategy, goals and plans.	-0.1599	0.8669	-2.9683	0.0033
40	38	Having the ability to change careers within the same organisation.	-0.1684	1.0162	-2.6675	0.0081
41	42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	-0.1694	0.9890	-2.7571	0.0062
42	50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	-0.1700	0.8841	-3.0947	0.0022
43	23	Being financially rewarded in accordance with my contribution and performance.	-0.2025	0.8784	-3.7102	0.0003
44	16	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	-0.2392	1.0870	-3.5414	0.0005
45	37	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	-0.2447	0.8595	-4.5825	0.0000
46	44	Having someone in the workplace who encourages my progress and development.	-0.2478	0.9056	-4.4027	0.0000

Rank	Statement number	Statements satisfied in current organisation	Mean	StDev	t-value	p-value
47	26	Having a well-designed and adhered to performance appraisal system.	-0.2483	1.0961	-3.6462	0.0003
48	2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	-0.4223	0.7612	-8.9286	0.0000
49	25	Having opportunities to obtain global exposure and experience.	-0.6215	1.1058	-9.0455	0.0000
50	14	Being given share options in the company.	-1.3223	1.5034	-14.1552	0.0000

The Chi^2 p-value across all of the fifty "satisfaction" questions is 0.6907.

Table 115: Gaylard's (2004) second set of statements reanalysed using Stacey's (2005) distribution fitting approach

Rank	Statement number	Statements satisfied in current organisation	Mean	StDev	t-value	p-value
1	10	Having a good working relationship with my colleagues.	0.6938	0.7528	14.2464	0.0000
2	17	Being part of a pension or provident scheme.	0.5409	1.4578	5.7358	0.0000
3	24	Having open and honest two-way communication channels with my direct manager.	0.4792	0.9807	7.5536	0.0000
4	29	Having flexible work hours.	0.4780	1.0781	6.8541	0.0000
5	32	Having sufficient leave and the ability to exercise it when most suitable to me.	0.4286	0.9720	6.8170	0.0000
6	8	Having a competent manager.	0.4194	0.9393	6.9033	0.0000
7	22	Knowing that my skills and experience are sufficient for the job at hand.	0.3370	0.8069	6.4565	0.0000
8	28	Working in teams.	0.3107	0.8442	5.6904	0.0000
9	9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	0.2941	0.8282	5.4888	0.0000
10	35	Having an empowering and constructive working relationship with my direct manager.	0.2935	0.8553	5.3044	0.0000
11	30	Having a good balance between my work and home life.	0.2842	0.9635	4.5593	0.0000
12	3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	0.1891	0.9092	3.2157	0.0015
13	1	Having a manager who really cares for me as a human being.	0.1842	0.9105	3.1284	0.0020
14	12	Having a clear understanding of what is expected of me.	0.1620	0.8005	3.1279	0.0020
15	18	Being in an environment which encourages use of initiative without fear of punishment or failure.	0.1062	0.8206	2.0005	0.0466
16	40	Having fun on the job.	0.0612	0.8368	1.1309	0.2592
17	20	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	0.0276	0.7807	0.5474	0.5846

Rank	Statement number	Statements satisfied in current organisation	Mean	StDev	t-value	p-value
18	19	Having a sense of loyalty to remain with and continue to serve the organisation.	0.0151	0.9194	0.2535	0.8001
19	46	Having the opportunity to do what I do best, every day.	0.0070	0.8601	0.1252	0.9004
20	13	Having a competitive market-related remuneration package.	0.0020	0.8457	0.0368	0.9707
21	21	Having a job which allows me to be creative and innovative.	-0.0150	0.7977	-0.2910	0.7713
22	39	Working in a culture of excellence and continuous improvement.	-0.0258	0.8362	-0.4778	0.6332
23	41	Working in an ever-changing environment.	-0.0267	0.9325	-0.4431	0.6581
24	47	Having a close colleague or good friend at work.	-0.0303	1.0796	-0.4341	0.6646
25	45	Working in an organisation which has clear and sound governance over its core activities.	-0.0572	0.8732	-1.0126	0.3123
26	48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	-0.0673	1.0768	-0.9663	0.3349
27	4	Being able to do project work.	-0.0713	1.0275	-1.0726	0.2845
28	49	Being able to influence the kind of work that gets assigned to me.	-0.0756	0.7702	-1.5167	0.1307
29	37	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	-0.0779	0.8493	-1.4181	0.1575
30	34	Having the freedom and time to interact socially with other employees at work.	-0.0997	0.9390	-1.6421	0.1019
31	25	Having opportunities to obtain global exposure and experience.	-0.1018	1.1202	-1.4044	0.1615
32	23	Being financially rewarded in accordance with my contribution and performance.	-0.1122	0.9362	-1.8532	0.0651
33	50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	-0.1224	0.9126	-2.0729	0.0393
34	36	Receiving clear and frequent communications on strategy, goals and plans.	-0.1283	0.8609	-2.3041	0.0221
35	43	Being able to positively influence peoples' lives and "make a difference".	-0.1292	0.8839	-2.2599	0.0247

Rank	Statement number	Statements satisfied in current organisation	Mean	StDev	t-value	p-value
36	11	Working for a company which identifies and looks after its high performers.	-0.1296	0.8353	-2.3985	0.0172
37	27	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	-0.1368	0.8584	-2.4636	0.0145
38	38	Having the ability to change careers within the same organisation.	-0.1867	1.0127	-2.8494	0.0048
39	44	Having someone in the workplace who encourages my progress and development.	-0.2084	0.9256	-3.4809	0.0006
40	31	Receiving medical aid benefits.	-0.2109	1.5067	-2.1643	0.0314
41	2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	-0.2145	0.8773	-3.7806	0.0002
42	14	Being given share options in the company.	-0.2527	1.5438	-2.5305	0.0120
43	42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	-0.2795	0.9777	-4.4192	0.0000
44	6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	-0.2932	0.8356	-5.4252	0.0000
45	26	Having a well-designed and adhered to performance appraisal system.	-0.2964	0.9842	-4.6556	0.0000
46	16	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	-0.3192	1.0030	-4.9202	0.0000
47	15	Seeing strong decision-making by those in authority within the organisation.	-0.3399	0.8315	-6.3189	0.0000
48	33	Having my financial package structured so as to minimise my tax obligation.	-0.4143	1.1210	-5.7137	0.0000
49	5	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	-0.4357	1.0355	-6.5045	0.0000

Rank	Statement number	Statements satisfied in current organisation	Mean	StDev	t-value	p-value
50	7	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	-0.4550	1.0326	-6.8125	0.0000

The Chi^2 p-value across all of the Gaylard (2004) reanalysed fifty "satisfaction" questions is 0.4463.

APPENDIX P

Comparison of statement means and rankings between the current research and the reanalysed Gaylard (2004) results for the second set of statements

Table 116: Comparison of ranked means (current research versus Gaylard (2004)) – Variables satisfied in current organisation

Statement number	Statements satisfied in current organisation	Ranking	Mean	Gaylard ranking	Gaylard mean
1	Having a manager who really cares for me as a human being.	34	-0.1082	13	0.1842
2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	48	-0.4223	41	-0.2145
3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	10	0.1514	12	0.1891
4	Being able to do project work.	19	0.0901	27	-0.0713
5	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	16	0.1105	49	-0.4357
6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	25	0.0108	44	-0.2932
7	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	37	-0.1270	50	-0.4550
8	Having a competent manager.	7	0.2911	6	0.4194
9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	12	0.1477	9	0.2941
10	Having a good working relationship with my colleagues.	5	0.4263	1	0.6938
11	Working for a company which identifies and looks after its high performers.	30	-0.0287	36	-0.1296
12	Having a clear understanding of what is expected of me.	18	0.0917	14	0.1620
13	Having a competitive market-related remuneration package.	36	-0.1188	20	0.0020
14	Being given share options in the company.	50	-1.3223	42	-0.2527
15	Seeing strong decision-making by	31	-0.0637	47	-0.3399

Statement number	Statements satisfied in current organisation	Ranking	Mean	Gaylard ranking	Gaylard mean
	those in authority within the organisation.				
16	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	44	-0.2392	46	-0.3192
17	Being part of a pension or provident scheme.	1	0.8976	2	0.5409
18	Being in an environment which encourages use of initiative without fear of punishment or failure.	22	0.0401	15	0.1062
19	Having a sense of loyalty to remain with and continue to serve the organisation.	29	-0.0190	18	0.0151
20	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	20	0.0697	17	0.0276
21	Having a job which allows me to be creative and innovative.	21	0.0578	21	-0.0150
22	Knowing that my skills and experience are sufficient for the job at hand.	8	0.2293	7	0.3370
23	Being financially rewarded in accordance with my contribution and performance.	43	-0.2025	32	-0.1122
24	Having open and honest two-way communication channels with my direct manager.	6	0.2960	3	0.4792
25	Having opportunities to obtain global exposure and experience.	49	-0.6215	31	-0.1018
26	Having a well-designed and adhered to performance appraisal system.	47	-0.2483	45	-0.2964
27	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	38	-0.1407	37	-0.1368
28	Working in teams.	9	0.1921	8	0.3107
29	Having flexible work hours.	4	0.4298	4	0.4780
30	Having a good balance between my work and home life.	14	0.1204	11	0.2842
31	Receiving medical aid benefits.	33	-0.0985	40	-0.2109
32	Having sufficient leave and the ability to exercise it when most suitable to me.	3	0.4446	5	0.4286
33	Having my financial package structured so as to minimise my tax obligation.	35	-0.1133	48	-0.4143
34	Having the freedom and time to interact socially with other	13	0.1286	30	-0.0997

Statement number	Statements satisfied in current organisation	Ranking	Mean	Gaylard ranking	Gaylard mean
	employees at work.				
35	Having an empowering and constructive working relationship with my direct manager.	15	0.1170	10	0.2935
36	Receiving clear and frequent communications on strategy, goals and plans.	39	-0.1599	34	-0.1283
37	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	45	-0.2447	29	-0.0779
38	Having the ability to change careers within the same organisation.	40	-0.1684	38	-0.1867
39	Working in a culture of excellence and continuous improvement.	17	0.1093	22	-0.0258
40	Having fun on the job.	32	-0.0936	16	0.0612
41	Working in an ever-changing environment.	28	-0.0151	23	-0.0267
42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	41	-0.1694	43	-0.2795
43	Being able to positively influence peoples' lives and "make a difference".	26	-0.0060	35	-0.1292
44	Having someone in the workplace who encourages my progress and development.	46	-0.2478	39	-0.2084
45	Working in an organisation which has clear and sound governance over its core activities.	11	0.1514	25	-0.0572
46	Having the opportunity to do what I do best, every day.	23	0.0251	19	0.0070
47	Having a close colleague or good friend at work.	24	0.0134	24	-0.0303
48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	2	0.5185	26	-0.0673
49	Being able to influence the kind of work that gets assigned to me.	27	-0.0116	28	-0.0756
50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	42	-0.1700	33	-0.1224

The Chi^2 p-values across all of the fifty "satisfaction" questions are 0.6907 (current research) and 0.4463 (Gaylard, 2004).

APPENDIX Q

Full gap analysis

Table 117: High importance, highly satisfied

High importance, highly satisfied				
Statement number	**Statement**	**Importance mean [A]**	**Satisfied mean [B]**	**Gap = [A] – [B]**
30	Having a good balance between my work and home life.	0.50375	0.12037	0.38338
46	Having the opportunity to do what I do best, every day.	0.21630	0.02513	0.19117
18	Being in an environment which encourages use of initiative without fear of punishment or failure.	0.20542	0.04014	0.16528
12	Having a clear understanding of what is expected of me.	0.24266	0.09174	0.15092
24	Having open and honest two-way communication channels with my direct manager.	0.39154	0.29602	0.09552
21	Having a job which allows me to be creative and innovative.	0.14199	0.05776	0.08423
39	Working in a culture of excellence and continuous improvement.	0.18273	0.10931	0.07342
8	Having a competent manager.	0.33290	0.29114	0.04175
35	Having an empowering and constructive working relationship with my direct manager.	0.15302	0.11699	0.03602
20	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	0.10452	0.06967	0.03486
9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	0.13170	0.14766	-0.01596
29	Having flexible work hours.	0.37191	0.42976	-0.05785
22	Knowing that my skills and experience are sufficient for the job at hand.	0.15327	0.22934	-0.07607
5	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	0.02733	0.11054	-0.08321
48	Having the right tools to do my job well (PCs, hardware, software applications,	0.42617	0.51848	-0.09231

High importance, highly satisfied				
Statement number	Statement	Importance mean [A]	Satisfied mean [B]	Gap = [A] – [B]
	accessories etc.)			
32	Having sufficient leave and the ability to exercise it when most suitable to me.	0.34924	0.44460	-0.09536
10	Having a good working relationship with my colleagues.	0.08485	0.42633	-0.34148
17	Being part of a pension or provident scheme.	0.11262	0.89761	-0.78499

Table 118: High importance, low satisfaction

High importance, low satisfaction				
Statement number	Statement	Importance mean [A]	Satisfied mean [B]	Gap = [A] – [B]
13	Having a competitive market-related remuneration package.	0.48566	-0.11880	0.60446
23	Being financially rewarded in accordance with my contribution and performance.	0.39679	-0.20251	0.59930
50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	0.34337	-0.17000	0.51338
37	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	0.13552	-0.24474	0.38026
7	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	0.21183	-0.12698	0.33881
27	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	0.17042	-0.14066	0.31108
11	Working for a company which identifies and looks after its high performers.	0.20841	-0.02865	0.23706
33	Having my financial package structured so as to minimise my tax obligation.	0.08413	-0.11330	0.19742
40	Having fun on the job.	0.01955	-0.09355	0.11310
31	Receiving medical aid benefits.	0.01171	-0.09846	0.11017

Table 119: Low importance, low satisfaction

Low importance, low satisfaction				
Statement number	**Statement**	**Importance mean [A]**	**Satisfied mean [B]**	**Gap = [A] – [B]**
14	Being given share options in the company.	-0.72279	-1.32232	0.59953
25	Having opportunities to obtain global exposure and experience.	-0.31087	-0.62154	0.31067
16	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	-0.01462	-0.23920	0.22458
44	Having someone in the workplace who encourages my progress and development.	-0.06230	-0.24775	0.18546
26	Having a well-designed and adhered to performance appraisal system.	-0.09917	-0.24833	0.14916
36	Receiving clear and frequent communications on strategy, goals and plans.	-0.03321	-0.15989	0.12669
42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	-0.12562	-0.16944	0.04383
38	Having the ability to change careers within the same organisation.	-0.19922	-0.16845	-0.03077
1	Having a manager who really cares for me as a human being.	-0.14872	-0.10817	-0.04055
15	Seeing strong decision-making by those in authority within the organisation.	-0.11889	-0.06366	-0.05523
49	Being able to influence the kind of work that gets assigned to me.	-0.11317	-0.01158	-0.10159
19	Having a sense of loyalty to remain with and continue to serve the organisation.	-0.19530	-0.01898	-0.17632
43	Being able to positively influence peoples' lives and "make a difference".	-0.20313	-0.00600	-0.19712
2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	-0.67955	-0.42231	-0.25724
41	Working in an ever-changing environment.	-0.63069	-0.01505	-0.61564

Table 120: Low importance, highly satisfied

Low importance, highly satisfied				
Statement number	**Statement**	**Importance mean [A]**	**Satisfied mean [B]**	**Gap = [A] – [B]**
45	Working in an organisation which has clear and sound governance over its core activities.	-0.08135	0.15137	-0.23272
6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	-0.22262	0.01083	-0.23344
4	Being able to do project work.	-0.30867	0.09008	-0.39875
3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	-0.30286	0.15140	-0.45426
47	Having a close colleague or good friend at work.	-0.63533	0.01343	-0.64875
28	Working in teams.	-0.46243	0.19206	-0.65449
34	Having the freedom and time to interact socially with other employees at work.	-0.52879	0.12861	-0.65739

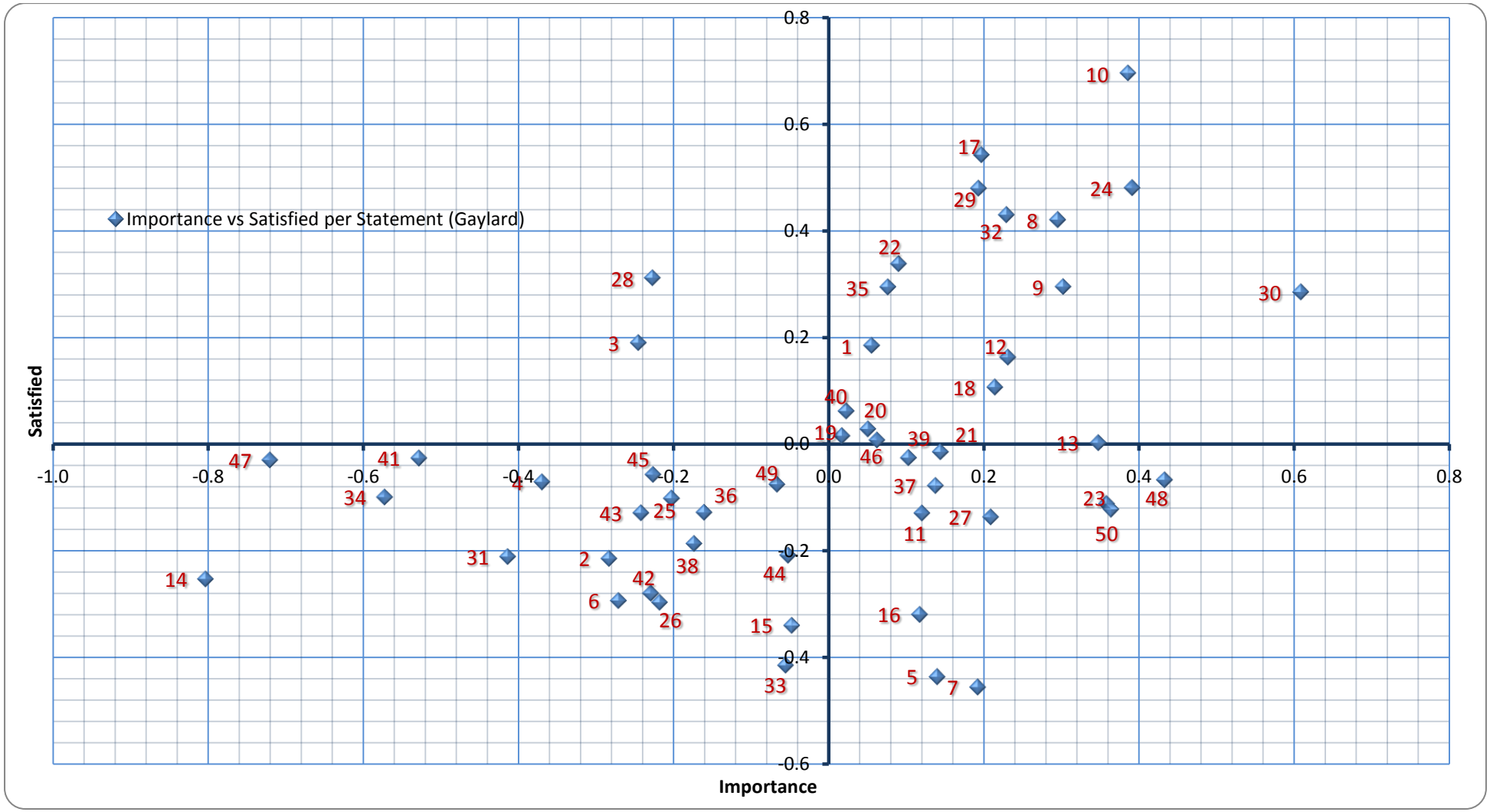


Figure 27: Importance vs satisfied (means) per statement (Gaylard (2004) data)

Table 121: High importance, highly satisfied (Gaylard (2004) data)

High importance, highly satisfied				
Statement number	**Statement**	**Importance mean [A]**	**Satisfied mean [B]**	**Gap = [A] - [B]**
13	Having a competitive market-related remuneration package.	0.34757	0.00201	0.34556
30	Having a good balance between my work and home life.	0.60809	0.28416	0.32393
18	Being in an environment which encourages use of initiative without fear of punishment or failure.	0.21431	0.10618	0.10813
12	Having a clear understanding of what is expected of me.	0.23099	0.16197	0.06901
46	Having the opportunity to do what I do best, every day.	0.06270	0.00697	0.05574
20	Having a clear understanding of my goals, and why they are important in ensuring the success of the organisation.	0.05098	0.02764	0.02333
9	Working in an environment which allows me a high level of autonomy and freedom to get the work done.	0.30229	0.29406	0.00823
19	Having a sense of loyalty to remain with and continue to serve the organisation.	0.01755	0.01508	0.00248
40	Having fun on the job.	0.02298	0.06121	-0.03824
24	Having open and honest two-way communication channels with my direct manager.	0.39105	0.47918	-0.08813
8	Having a competent manager.	0.29511	0.41943	-0.12432
1	Having a manager who really cares for me as a human being.	0.05578	0.18424	-0.12846
32	Having sufficient leave and the ability to exercise it when most suitable to me.	0.22923	0.42859	-0.19937
35	Having an empowering and constructive working relationship with my direct manager.	0.07665	0.29345	-0.21680
22	Knowing that my skills and experience are sufficient for the job at hand.	0.09034	0.33699	-0.24665
29	Having flexible work hours.	0.19328	0.47796	-0.28468
10	Having a good working relationship with my colleagues.	0.38576	0.69376	-0.30800
17	Being part of a pension or provident scheme.	0.19689	0.54085	-0.34396

Table 122: High importance, low satisfaction (Gaylard (2004) data)

High importance, low satisfaction				
Statement number	**Statement**	**Importance mean [A]**	**Satisfied mean [B]**	**Gap = [A] - [B]**
7	Knowing that there are strong career growth possibilities and that the organisation will align my career path with my personal interests and goals.	0.19215	-0.45502	0.64717
5	Having a sense of security that my job is not threatened and is mine as long as I'd like it.	0.14003	-0.43566	0.57568
48	Having the right tools to do my job well (PCs, hardware, software applications, accessories etc.)	0.43264	-0.06730	0.49994
50	Being fairly rewarded relative to other employees, based on my experience, qualifications and performance.	0.36382	-0.12237	0.48619
23	Being financially rewarded in accordance with my contribution and performance.	0.35827	-0.11223	0.47050
16	Having available a wide variety of training programmes and being supported and encouraged to improve my skills through training.	0.11747	-0.31921	0.43668
27	Having opportunities to develop new skills and knowledge and to use this in challenging and interesting ways.	0.20897	-0.13678	0.34575
11	Working for a company which identifies and looks after its high performers.	0.12051	-0.12960	0.25011
37	Having my inputs, opinions and the work that I produce duly considered, praised and rewarded where due.	0.13783	-0.07791	0.21574
21	Having a job which allows me to be creative and innovative.	0.14432	-0.01502	0.15933
39	Working in a culture of excellence and continuous improvement.	0.10321	-0.02584	0.12906

Table 123: Low importance, low satisfaction (Gaylard (2004) data)

Low importance, low satisfaction				
Statement number	**Statement**	**Importance mean [A]**	**Satisfied mean [B]**	**Gap = [A] - [B]**
33	Having my financial package structured so as to minimise my tax obligation.	-0.05495	-0.41433	0.35937
15	Seeing strong decision-making by those in authority within the organisation.	-0.04712	-0.33985	0.29273
44	Having someone in the workplace who encourages my progress and development.	-0.05193	-0.20840	0.15647
26	Having a well-designed and adhered to performance appraisal system.	-0.21706	-0.29640	0.07934
42	Having career paths that allow me to become an expert in my field without being penalised for not taking on management responsibilities.	-0.22868	-0.27948	0.05080
6	Having a clearly articulated corporate vision, goals and plans on how to achieve these goals.	-0.27013	-0.29324	0.02311
38	Having the ability to change careers within the same organisation.	-0.17281	-0.18665	0.01385
49	Being able to influence the kind of work that gets assigned to me.	-0.06602	-0.07556	0.00955
36	Receiving clear and frequent communications on strategy, goals and plans.	-0.16002	-0.12830	-0.03172
2	Having a job which does not contain too many overly stressful, tedious or less than satisfactory elements.	-0.28236	-0.21454	-0.06782
25	Having opportunities to obtain global exposure and experience.	-0.20184	-0.10177	-0.10007
43	Being able to positively influence peoples' lives and "make a difference".	-0.24123	-0.12922	-0.11201
45	Working in an organisation which has clear and sound governance over its core activities.	-0.22569	-0.05719	-0.16850
31	Receiving medical aid benefits.	-0.41270	-0.21093	-0.20176
4	Being able to do project work.	-0.36867	-0.07129	-0.29738
34	Having the freedom and time to interact socially with other employees at work.	-0.57106	-0.09974	-0.47131
41	Working in an ever-changing	-0.52701	-0.02673	-0.50028

Low importance, low satisfaction				
Statement number	Statement	Importance mean [A]	Satisfied mean [B]	Gap = [A] - [B]
	environment.			
14	Being given share options in the company.	-0.80157	-0.25270	-0.54887
47	Having a close colleague or good friend at work.	-0.71891	-0.03032	-0.68859

Table 124: Low importance, highly satisfied (Gaylard (2004) data)

Low importance, highly satisfied				
Statement number	Statement	Importance mean [A]	Satisfied mean [B]	Gap = [A] - [B]
3	Working in a safe, comfortable and pleasing physical environment (e.g. office location, layout, décor, etc.)	-0.24454	0.18913	-0.43366
28	Working in teams.	-0.22647	0.31073	-0.53720