

**AN HRM MODEL FOR ENHANCING PSYCHOLOGICAL
CAPITAL IN SOUTH AFRICAN ORGANISATIONS DURING A
PSYCHOLOGICAL RECESSION**

BY

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DECLARATION

"I, Anthonie Van Straaten Theron, hereby declare that:

- The work submitted in this thesis is my own produced under the guidance of my study leader;
- Information provided from other resources has been accredited to that source; and
- This thesis has not been previously submitted for an equivalent qualification at any other recognised higher institution."

A.V.S. THERON

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ABSTRACT

The rationale behind this study was to identify various positive Human Resource Management (HRM) practices that contribute to the development and enhancement of psychological capital (PsyCap) during a psychological recession. A psychological recession, which is defined as a negative cognitive and emotional condition perpetuated by prolonged socio-economic hardships and amplified by the media, (Bardwick, 2008) could negatively affect employees' PsyCap. While there has been no systematic study of the impact of various HRM practices on PsyCap (Gupta, 2013), a need existed to investigate and formulate best HRM practices for the development of employees' PsyCap during a psychological recession. Furthermore, this study also aimed to investigate the potential buffering effect of HRM practices on the negative experiences and perceptions associated with a psychological recession.

This research study took the form of a quantitative, cross-sectional design, using a composite questionnaire to measure personal vulnerability and exposure to the negative experiences associated with a psychological recession, the organisation's application of various positive HRM practices, and employees' levels of PsyCap. The target population consisted of all permanent and contract clinical and support staff employed at 43 fixed Primary Health Care (PHC) clinics situated in the West Rand District Municipality (WRDM) (n = 318).

Exploratory factor analysis (EFA) was employed to determine the factor loadings on the overall scales and based on these factor loadings, main factors were extracted. Reliability analysis indicated that the newly structured measurement instruments would produce consistent results with continued application. The hypotheses were tested through the application of Pearson's product moment correlation analysis, structural equation modelling (SEM), multiple regression analysis and a one-sample t-test.

The empirical results indicated that all respondents included in the study experienced some degree of a psychological recession. Although significant correlations were uncovered between psychological recession and PsyCap, personal exposure and vulnerability with regards to organisational change and psychological uncertainty was identified as a major factor that negatively affected employees' PsyCap.

The inferential results identified competence development practices as a crucial intervention for the enhancement of PsyCap during a psychological recession. Lastly, the inferential results revealed that employee recognition and empowerment are fundamental practices in order to negate the negative impact of a psychological recession.

Based on the results of this study, organisations have to proactively respond to a psychological recession by re-evaluating the effectiveness of their HRM actions and practices, in order to effectively enhance and maintain the PsyCap of their employees during a psychological recession.

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TABLE OF CONTENTS

DECLARATION	i
ABSTRACT.....	ii
ACKNOWLEDGEMENTS	iv
CHAPTERS 1-7	vi
LIST OF TABLES.....	xiii
LIST OF FIGURES	xv
LIST OF CHARTS.....	xvii
LIST OF INFOGRAPHICS	xvii
LIST OF ANNEXURES	xviii
REFERENCE LIST	280

CHAPTER 1: INTRODUCTION, PROBLEM STATEMENT AND OUTLINE OF RESEARCH PROJECT

1.1.	INTRODUCTION	1
1.2.	MAIN PROBLEM	7
1.3.	SUB-PROBLEMS AND OBJECTIVES OF THE RESEARCH.....	7
1.4.	THE CONTEXT AND SETTING OF THE RESEARCH.....	9
1.5.	DELIMITATION OF THE RESEARCH.....	12
1.5.1.	Size of the organisation	12
1.5.2.	Type of organisation	12
1.5.3.	Geographical demarcation.....	12
1.5.4.	Target employee groups and levels.....	12
1.6.	HYPOTHESES, CONSTRUCTS AND VARIABLES INCLUDED IN THIS RESEARCH STUDY	13

1.6.1.	Psychological recession (independent construct)	14
1.6.2.	PsyCap (dependent construct)	15
1.6.3.	HRM practices (independent construct).....	15
1.7.	REASONS FOR AND SIGNIFICANCE OF THE RESEARCH.....	16
1.8.	THE RESEARCH DESIGN	18
1.8.1.	Literature study	18
1.8.2.	Empirical study	19
1.8.3.	Population and sample	19
1.8.4.	Statistical methods.....	19
1.9.	ORGANISATION OF THE REMAINDER OF THE STUDY.....	20
1.10.	CONCLUSION.....	20

CHAPTER 2: THE SOUTH AFRICAN SOCIO-ECONOMIC ENVIRONMENT

2.1	INTRODUCTION	21
2.2	THE GLOBAL FINANCIAL CRISIS (2007-2009)	22
2.3	THE IMPACT OF THE GLOBAL FINANCIAL CRISIS ON THE SOUTH AFRICAN ECONOMY	23
2.4	THE SOUTH AFRICAN SOCIAL ENVIRONMENT	27
2.4.1	Unemployment.....	29
2.4.2	Labour unrest.....	31
2.4.3	Student protest action	34
2.4.4	Poverty.....	36
2.4.5	Crime	40
2.4.6	HIV/AIDS	43
2.4.7	Unethical behaviour	46
2.5	CONCLUSION.....	48

CHAPTER 3: A PSYCHOLOGICAL RECESSION

3.1	INTRODUCTION	49
3.2	THE NATURE OF A PSYCHOLOGICAL RECESSION.....	50
3.2.1	Defining a psychological recession.....	51
3.2.2	Negative consequences of a psychological recession.....	56
3.2.3	Components constituting a psychological recession.....	62
3.2.3.1	Work-related tension and psychological distress.....	63
3.2.3.2	Organisational change and psychological uncertainty.....	67
3.2.3.3	Work-family conflict.....	72
3.2.3.4	Job insecurity, job loss and unemployment.....	74
3.3	THE ROLE OF THE ORGANISATION IN BUFFERING A PSYCHOLOGICAL RECESSION	78
3.4	CONCLUSION.....	83

CHAPTER 4: PSYCHOLOGICAL CAPITAL

4.1	INTRODUCTION	85
4.2	THE BACKGROUND AND FOUNDATION OF PSYCAP	86
4.3	COMPONENTS OF PSYCAP.....	91
4.3.1	Hope	92
4.3.2	Self-efficacy	95
4.3.3	Resilience	98
4.3.4	Optimism.....	101
4.4	POSITIVE OUTCOMES ASSOCIATED WITH PSYCAP.....	103
4.4.1	Employee attitudes and behaviour.....	104

4.4.2	Employee wellbeing	107
4.4.3	Individual and organisational performance	108
4.5	THE INFLUENCE OF A PSYCHOLOGICAL RECESSION ON PSYCAP	109
4.6	THE ROLE OF HRM PRACTICES IN DEVELOPING PSYCAP	112
4.7	CONCLUSION	119

CHAPTER 5: RESEARCH METHODOLOGY AND ANALYSIS OF BIOGRAPHICAL INFORMATION

5.1	INTRODUCTION	121
5.2	RESEARCH OBJECTIVES, HYPOTHESES AND DISCUSSION OF THEORETICAL MODEL	121
5.3	RESEARCH DESIGN	124
5.4	SAMPLING DESIGN.....	132
5.4.1	Step 1: Define the target population	133
5.4.2	Step 2: Determine the sampling frame.....	135
5.4.3	Step 3: Select a sampling technique.....	137
5.4.4	Step 4: Determine the sample size	140
5.4.5	Step 5: Execute the sampling process.....	142
5.5	DATA COLLECTION	142
5.5.1	Research instrument.....	143
5.5.2	Questionnaire structure and design	145
5.5.2.1	Section B: The Psychological Recession Scale.....	147
5.5.2.1.1	Section B1: Job insecurity, job loss and unemployment.....	148
5.5.2.1.2	Section B2: Work-family conflict	148

5.5.2.1.3	Section B3: Organisational change and psychological uncertainty 148	
5.5.2.1.4	Section B4: Work-related tension and psychological distress... 149	
5.5.2.2	Section C: Positive HRM practices 149	
5.5.2.3	Section D: PsyCap Scale (PCQ-24) 151	
5.5.3	Pilot study 151	
5.5.4	Administration of the questionnaire..... 153	
5.5.5	Response rate and analysis of biographical details 154	
5.5.6	Proportionate representation of the target population 157	
5.6	DATA ANALYSIS TECHNIQUES USED IN THIS STUDY..... 158	
5.6.1	Descriptive statistical techniques 158	
5.6.2	Inferential statistical techniques 158	
5.6.3	Exploratory Factor Analysis (EFA)..... 161	
5.6.3.1	Section B: The Psychological Recession Scale 162	
5.6.3.2	Section C: Positive HRM practices 167	
5.6.3.3	Section D: PCQ-24 171	
5.7	RELIABILITY AND VALIDITY 176	
5.7.1	Reliability 176	
5.7.2	Validity 179	
5.7.2.1	The Job Insecurity Questionnaire (JIQ) 181	
5.7.2.2	Work-family Conflict Scale 181	
5.7.2.3	Organisational change and psychological uncertainty 181	
5.7.2.4	Work Tension Scale..... 181	
5.7.2.5	Positive HRM practices 182	
5.7.2.6	Psychological Capital Questionnaire (PCQ-24) 182	
5.8	ETHICAL CONSIDERATIONS 182	
5.8.1	Voluntary participation (informed consent)..... 183	
5.8.2	Permission to conduct the study 183	
5.8.3	Anonymity 183	
5.8.4	Confidentiality 183	

5.9	CONCLUSION	184
-----	------------------	-----

CHAPTER 6: ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS

6.1	INTRODUCTION	185
6.2	DESCRIPTIVE STATISTICS	186
6.2.1	Section B: Psychological recession	186
6.2.1.1	Section B1: Job insecurity, job loss and unemployment	187
6.2.1.2	Section B2: Work-family conflict	190
6.2.1.3	Section B3: Organisational change and psychological uncertainty 194	
6.2.1.4	Section B4: Work-related tension and psychological distress ...	196
6.2.2	Section C: Positive HRM practices	199
6.2.2.1	Section C1: Recognition practices	200
6.2.2.2	Section C2: Empowerment practices	204
6.2.2.3	Section C3: Competence development practices	207
6.2.2.4	Section C4: Fair rewards practices	210
6.2.2.5	Section C5: Information-sharing practices	213
6.2.2.6	Section C6: Employee wellness practices	216
6.2.3	Section D: PsyCap	219
6.2.3.1	Self-efficacy (Items D1.1 – D1.6)	220
6.2.3.2	Hope (Items D1.7 – D1.12)	222
6.2.3.3	Resilience (Items D1.13 – D1.18)	223
6.2.3.4	Optimism (Items D1.19 – D1.24)	224
6.3	INFERENCE STATISTICS AND HYPOTHESIS TESTING	225
6.3.1	Pearson's product-moment correlation analysis	227
6.3.2	Structural equation modelling	232
6.3.2.1	Testing the theoretical model	234
6.3.3	Multiple regression analysis	237
6.3.4	One-sample t-test	250

6.4	CONCLUSION	251
-----	------------------	-----

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1	INTRODUCTION	252
7.2	SUMMARY OF THE STUDY	252
7.2.1	Resolution of theoretical sub-problems	254
7.2.2	Resolution of empirical sub-problems	258
7.3	SUMMARY OF MAIN FINDINGS	261
7.3.1	Main findings pertaining to the descriptive research results	261
7.3.1.1	Section B: Psychological Recession	261
7.3.1.2	Section C: Positive HRM practices	262
7.3.1.3	Section D: PsyCap	263
7.3.2	Main findings pertaining to the inferential research results	263
7.3.2.1	Main findings pertaining to the correlation analysis	263
7.3.2.2	Main findings pertaining to SEM	265
7.3.2.3	Main findings pertaining to the multiple regression analysis	266
7.3.2.4	Main findings pertaining to the one-sample t-test	268
7.4	LIMITATIONS OF THE STUDY	270
7.4.1	Limitations of the literature review	270
7.4.2	Limitations of the empirical research	270
7.5	RECOMMENDATIONS	272
7.5.1	Recommendations for managers and HR practitioners	272
7.5.2	Recommendations for future research	277
7.6	CONTRIBUTION OF THE STUDY AND CONCLUSION	278

LIST OF TABLES

Table 1.1: Retrenchment crisis statistics: 2015-2016.....	2
Table 1.2: Research constructs and variables	14
Table 2.1: Damages to universities as a result of student protests.....	36
Table 2.2: Poverty headcounts in 2006, 2009 and 2011	39
Table 2.3: National crime statistics for 2014-2015	41
Table 3.1: Retrenchments based on Solidarity's analysis of media sources.....	70
Table 5.1: Key differences between qualitative and quantitative research designs (Adapted from Neuman, 2011).	127
Table 5.2: Key differences between research design and research methodology (Adapted from Babbie and Mouton, 2001).....	127
Table 5.3: Total number of fixed PHC facilities per WRDM local sub-district.....	135
Table 5.4: Distribution of the target population: Total staff headcounts per core HRH category (N = 1 336).....	137
Table 5.5: Proportional stratified sampling per core HRH category	139
Table 5.6: A decision guideline for determining sample size (Adapted from Krejcie and Morgan, 1970).....	141
Table 5.7: Summary of the sample plan	142
Table 5.8: Summary of sample profile	155
Table 5.9: Frequency distribution of demographic variables of the sample (n=318).	156
Table 5.10: Proportionate representation of the target population	157
Table 5.11: Descriptive statistical techniques used in this study.....	160
Table 5.12: Initial eigenvalues of the Psychological Recession Scale	163
Table 5.13: Results of the EFA on the four-factor solution of the Psychological Recession Scale	164
Table 5.14: Results of the EFA on the Psychological Recession Scale excluding items B1.1, B3.3, B4.1, B4.2, B4.3 and B4.6.	166
Table 5.15: Initial eigenvalues of the positive HRM practices scale.....	167
Table 5.16: Results of the EFA on the five-factor solution of the positive HRM practices scale.....	168

Table 5.17: Results of the EFA on the positive HRM practices scale excluding items C2.4, C2.5, C5.8 and C5.9.....	170
Table 5.18: Initial eigenvalues of the PCQ-24 during the first round of EFA.....	172
Table 5.19: Results of the first round of EFA on the PCQ-24	173
Table 5.20: Results of the EFA on the PCQ-24 excluding reversed items (D1.13, D1.20 and D1.23).....	174
Table 5.21: Results of the EFA on the PCQ-24 two-factor solution excluding items D1.21 and D1.22	175
Table 5.22: Reliability of measuring scales and their subscales (n=318).....	178
Table 6.1: Descriptive statistics for Section C1: Recognition practices.....	201
Table 6.2: Means and standard deviations of scores for Section C1: Recognition practices.....	203
Table 6.3: Descriptive statistics for Section C2: Empowerment practices.....	205
Table 6.4: Means and standard deviations of scores for Section C2: Empowerment practices.....	206
Table 6.5: Descriptive statistics for Section C3: Competence development practices	208
Table 6.6: Means and standard deviations of scores for Section C3: Competence development practices	209
Table 6.7: Descriptive statistics for Section C4: Fair rewards practices.....	211
Table 6.8: Means and standard deviations of scores for Section C4: Fair rewards practices.....	212
Table 6.9: Descriptive statistics for Section C5: Information-sharing practices.....	214
Table 6.10: Means and standard deviations of scores for Section C5: Information-sharing practices	215
Table 6.11: Descriptive statistics for Section C6: Employee wellness practices	217
Table 6.12: Means and standard deviations of scores for Section C6: Employee wellness practices	218
Table 6.13: Means and standard deviations of scores for Section D: Dimensions of PsyCap and total PsyCap	220
Table 6.14: Frequency distribution for the dimensions of PsyCap and Total PsyCap	220

Table 6.15: Hypotheses formulated for Pearson’s product-moment correlation analysis	228
Table 6.16: Correlations between psychological recession and PsyCap	229
Table 6.17: Correlations between positive HRM practices and PsyCap	231
Table 6.18: Correlations between positive HRM practices and psychological recession.....	232
Table 6.19: Fit indices for the theoretical model.....	235
Table 6.20: Standardised regression weights of path model	236
Table 6.21: Multiple regression analysis: The influence of psychological recession on PsyCap	238
Table 6.22: Multiple regression analysis: The influence of psychological recession factors on PsyCap factors.....	239
Table 6.23: Multiple regression analysis: The influence of HRM practices on PsyCap	241
Table 6.24: Multiple regression analysis: The influence of HRM practices on PsyCap factors.....	243
Table 6.25: Multiple regression analysis: The influence of HRM practices on psychological recession	246
Table 6.26: Multiple regression analysis: The influence of HRM practices on four psychological recession factors	247
Table 6.27: One-sample t-tests: Factors (n = 318; d.f. = 317)	250
Table 7.1: Summary of main findings pertaining to the correlation analysis	264
Table 7.2: Summary of main findings pertaining to the SEM	266
Table 7.3: Summary of main findings pertaining to the multiple regression analysis.....	266
Table 7.4: Summary of main findings pertaining to the one-sample t-test	268

LIST OF FIGURES

Figure 1.1: Distribution of health professionals in South Africa (Adapted from Operation Phakisa, 2015).....	10
Figure 2.1: Social Progress Index Component-level Framework.	28
Figure 2.2: Trends in the number of work stoppages (2010-2014).	31

Figure 2.3: Trends in working days lost in South Africa (2010 – 2014).....	32
Figure 3.1: South Africans feeling that the country is heading in the right direction	54
Figure 3.2: Confidence levels among South Africans of all races	55
Figure 3.3: Global engagement trends compared to global GDP	59
Figure 3.4: Africa-Middle East engagement trends compared to GDP	59
Figure 3.5: Overall engagement among the employed population in 142 countries worldwide.....	60
Figure 3.6: Employee engagement data for South Africa, Botswana and Nigeria....	61
Figure 4.1: The state-trait continuum	88
Figure 4.2: The influence of PsyCap on employee attitudes and behaviours	105
Figure 4.3: The Psychological Capital Intervention (PCI).....	116
Figure 5.1: Conceptual model.....	123
Figure 5.2: Alignment between research objectives, sub-problems and hypotheses	129
Figure 5.3: The sampling design process (Adapted from Malhotra, 2007).....	133
Figure 5.4: Map of the West Rand District Municipality.....	134
Figure 6.1: Refined Conceptual Model.....	226
Figure 6.2: Structural equations model	235
Figure 6.3: Diagram illustrating hypothesis 2	237
Figure 6.4: Diagram illustrating hypotheses 3 and 4	241
Figure 6.5: Diagram illustrating hypothesis 5	245
Figure 7.1: Alignment between the main problem, research objectives and theoretical and empirical sub-problems	253
Figure 7.2: Alignment between the research objectives, theoretical sub-problems and the literature review	255
Figure 7.3: Alignment between the research objectives, empirical sub-problems, research questionnaire and hypotheses	259
Figure 7.4: Integration and alignment of the main problem, research objectives, theoretical and empirical sub-problems, literature review, research questionnaire, hypotheses and main findings.....	269

LIST OF CHARTS

Chart 6.1: Responses according to Section C1: Recognition practices	200
Chart 6.2: Responses according to Section C2: Empowerment practices (n=318).....	204
Chart 6.3: Responses according to Section C3: Competence development practices (n=318)	207
Chart 6.4: Responses according to Section C4: Fair rewards practices (n=318).....	210
Chart 6.5: Responses according to Section C5: Information-sharing practices (n=318).....	213
Chart 6.6: Responses according to Section C6: Employee wellness practices (n=318).....	216
Chart 6.7: Responses to items D1.1 – D1.6 (Self-efficacy).....	221
Chart 6.8: Responses to items D1.7 – D1.12 (Hope).....	222
Chart 6.9: Responses to items D1.13 – D1.18 (Resilience).....	223
Chart 6.10: Responses to items D1.19 – D1.24 (Optimism)	224

LIST OF INFOGRAPHICS

Infographic 6.1: Perceptions of job insecurity, job loss and unemployment (n=318).....	188
Infographic 6.2: Perceptions of work-family conflict (n=318).....	191
Infographic 6.3: Perceptions of organisational change and psychological uncertainty (n = 318).....	194
Infographic 6.4: Perceptions of work-related tension and psychological distress (n=318).....	197

LIST OF ANNEXURES

- Annexure A: Questionnaire
- Annexure B: Questionnaire cover letter
- Annexure C: Permission letter
- Annexure D: Ethics approval letter
- Annexure E: Turnitin report

**CHAPTER 1: INTRODUCTION, PROBLEM STATEMENT AND OUTLINE
OF RESEARCH PROJECT**

1.1.	INTRODUCTION	1
1.2.	MAIN PROBLEM	7
1.3.	SUB-PROBLEMS AND OBJECTIVES OF THE RESEARCH.....	7
1.4.	THE CONTEXT AND SETTING OF THE RESEARCH.....	9
1.5.	DELIMITATION OF THE RESEARCH.....	12
1.5.1.	Size of the organisation	12
1.5.2.	Type of organisation	12
1.5.3.	Geographical demarcation.....	12
1.5.4.	Target employee groups and levels.....	12
1.6.	HYPOTHESES, CONSTRUCTS AND VARIABLES INCLUDED IN THIS RESEARCH STUDY.....	13
1.6.1.	Psychological recession (independent construct)	14
1.6.2.	PsyCap (dependent construct)	15
1.6.3.	HRM practices (independent construct).....	15
1.7.	REASONS FOR AND SIGNIFICANCE OF THE RESEARCH.....	16
1.8.	THE RESEARCH DESIGN	18
1.8.1.	Literature study	18
1.8.2.	Empirical study	19
1.8.3.	Population and sample	19
1.8.4.	Statistical methods.....	19
1.9.	ORGANISATION OF THE REMAINDER OF THE STUDY.....	20

1.10.	CONCLUSION.....	20
-------	-----------------	----

LIST OF TABLES

Table 1.1:	Retrenchment crisis statistics: 2015-2016.....	2
Table 1.2:	Research constructs and variables	14

LIST OF FIGURES

Figure 1.1:	Distribution of health professionals in South Africa (Adapted from Operation Phakisa, 2015)	10
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CHAPTER 1: INTRODUCTION, PROBLEM STATEMENT AND OUTLINE OF RESEARCH PROJECT

1.1. INTRODUCTION

The global financial crisis that started in 2007 has been considered the worst economic recession since the Great Depression of the 1930's (Antoniou & Cooper, 2013). Although the South African economy is relatively small and accounts for less than one per cent of global Gross Domestic Product (GDP), South Africa was not immune to the impact of the global financial crisis, due to the country's dependence on foreign trade and investment (Baxter, 2009). South Africa has in the meantime experienced a relatively weak recovery from the 2007 global economic recession.

In January 2014, the South African Reserve Bank raised its repo (key lending) rate from 5% to 5.5% and according to Gill Marcus, Bank Governor of the South African Reserve Bank, the primary cause of the rate increase was the falling South African Rand (BBC News, 2014). As a result, South African banks increased their prime lending rate (Finance24, 2014c). The Rand, which was the worst performer among the major currencies competing with the Dollar (Brand, 2012), slumped to a five-year low against the Dollar during March 2014, trading at R10.67 a Dollar (Finance24, 2014b). As a result of political instability and insecurity around the position of the Finance Minister, the Rand further downgraded to R13.70 against the Dollar. For South Africa, a lower Rand implies more expensive imports, which put more pressure on South African consumers and organisations (Maswanganyi, 2014b).

South Africa's economic growth was 0.7% in the third quarter of 2013, which was the lowest level of growth since the beginning of the 2009 global financial crisis (Maswanganyi, 2013). Economic growth further weakened during the first quarter in 2013 due to labour unrest and high consumer debt (Maswanganyi, 2013). The financial, labour and consumer markets were therefore under pressure.

As a result of weaker economic conditions, many organisations announced downsizing plans. Sidler (2014) reported that over 35 000 South African employees have been retrenched in January 2014 alone. The South African economy shed 118 397 jobs during February 2014, which, according to Adcorp labour economist Loane Sharp, was the biggest monthly loss of jobs reported in nearly three years (Adcorp, 2014a). According to the 2016 South African Labour Market Index (LMI), a report compiled by trade union Solidarity, the South African labour market declined in every key metric (Solidarity Research Institute, 2016) as a result of a deteriorating labour environment with slow wage growth, weak net employment, and retrenchments in most sectors (Adcorp, 2016).

Table 1.1 provides an overview of the retrenchment crisis statistics published in the 2016 Solidarity Retrenchment Report (2016). This report was compiled by the Solidarity Research Institute (2016) and from integrated reports that appeared in the mainstream South African media in the period from 11 August 2015 to March 2016. These media reports covered retrenchments (compulsory layoffs, voluntary separations packages, early retirement packages) as well as possible staff reductions, as made known in terms of notices to trade unions under the Labour Relations Act. It also covers general reports on job losses foreseen (Solidarity Research Institute, 2016). From Table 1.1 it is evident that several South African organisations in various sectors retrenched an overall total number of 58 549 employees. The majority of these retrenchments occurred in the mining and cement sector (29 261), followed by 8 141 retrenchments in the communication sector.

Table 1.1: Retrenchment crisis statistics: 2015-2016

Chemical Sector		
Company	Number of Employees Affected	Date
Canelands	29	2016/02/18
Colgate Palmolive Boksburg	133	2016/02/18
Nakpak DivFood	53	2016/02/24
NOC Oil and Gas Services	46	2016/03/18
Verref Shaped (Pty) Ltd	174	2016/02/18
Chemspec (Chemical Specialities)	400	2015/08/09
Total number of employees	835	

Communication Sector		
Company	Number of Employees Affected	Date
Media24	2	2016/02/18
MTN	12	2016/04/18
Telkom	255	2016/03/16
Cell C	47	2015/05/08
Telkom (2)	7 800	2015/05/04
Mail and Guardian	25	2015/07/02
Total number of employees	8 141	
Individual Members		
Company	Number of Employees Affected	Date
Brolaz Projects	33	2016/03/02
Christian Art Distributors	19	2016/02/18
Dimension Data	4	2016/04/18
Harvard Cafe	1	2016/04/19
JD Group	1 800	2016/03/02
Permian Holdings	1	2016/04/18
Samoro Memorials	1	2016/04/20
Eerste Rivier Youth Rehabilitation Centre	40	2015/07/02
National Youth Development Agency	60	2015/06/22
South African Post Office	5 065	2015/04/15
Total number of employees	7 024	
Metal and Engineering Sector		
Company	Number of Employees Affected	Date
Air and Allied	7	2016/04/18
David Brown Gear Industries	17	2016/04/19
Dynamic Machinery	33	2016/02/22
DCD Group	245	2016/04/01
ERD Fab Sasolburg	32	2016/02/18
Evrax Highveld Steel	1721	2016/02/18
Evrax Highveld Steel (Contractors)	400	2016/02/18
High Duty Castings	55	2016/02/12
Mogale Alloys Krugersdorp	14	2016/02/18
NDT Projects	14	2016/02/23
SA Compensators	18	2016/02/18
Samancor Smelters	280	2016/02/18
Steinmuller / Bifinger	250	2016/02/18
Sulzer Pumps	35	2016/03/31
Transalloy	40	2016/04/12
Turnmill Proquip Engineering	15	2016/04/19
Vanchem Vanadium	460	2016/02/18
Viva Engineering Projects	32	2016/04/04
Scaw Metals Group	1 000	2015/08/05
Macsteel	600	2015/07/30
Arcelormittal SA	1 200	2015/07/24
Aveng Trident Steel	700	2015/05/08
I.G. Tooling	470	-
Argent Industrial	280	2015/04/24
Total number of employees	7 918	

Mining and Cement Sector		
Company	Number of Employees Affected	Date
Afrisam Cement	300	2016/02/18
Anglo American Platinum	2 000	2016/03/03
Assmang Black Rock	395	2016/02/18
Assmang Khumani	250	2016/02/18
Aveng Moolmans (Black Rock)	57	2016/02/18
Aveng Moolmans (King and Kolomela)	175	2016/02/18
Aveng Moolmans (Sishen)	600	2016/02/18
Booyesen Bore	40	2016/02/18
Bokoni Platinum	2 600	2016/04/05
De Beers Venetia	214	2016/02/18
Dilokong Chromoyn	2 000	2016/02/01
Exarro Arnot	1 600	2016/02/18
Exarro (Support Services)	565	2016/04/18
Hitricon	200	2016/02/18
Hotazel Manganese Mine (South 32)	400	2016/02/18
Joy Global Inc	68	2016/03/16
Contractors at Sishen	1 300	2016/02/18
Kumba (Sishen)	2 633	2016/02/18
Lonmin	5 108	2016/03/04
Lower Orange River mines	125	2016/02/22
Lyttelton Dolomite	15	2016/03/10
Murray & Roberts Venetia	31	2016/02/18
Northern Cape Iron & Steel cc	7	2016/02/18
Platchro Mining Services	50	2016/02/18
Protea Coin (Harmony Goldmine)	14	2016/03/15
Samancor Mines	1 700	2016/02/18
Sheltam Rail Randfontein / Virginia	22	2016/02/18
South 32	620	2016/02/18
Tau Mining	175	2016/02/18
Tshipe Ntle Manganese	365	2016/02/18
Vantage Goldfields Lily Mine	800	2016/02/18
Harmony Gold	400	-
Kumba Iron Ore (3)	1 160	2015/07/17
Capital Development Services (CDS)	165	2015/07/06
Harmony Gold	3 100	2015/06/03
Chamber of Mines	7	2015/06/29
Total number of employees	29 261	
Professional Industry		
Company	Number of Employees Affected	Date
Denel Strategic Skill Agreement	62	2016/02/18
ABSA	1 952	2016/03/29
North West University	55	2016/03/31
First National Bank	1 151	2016/03/16
VME	150	2016/02/18
University of South Africa	2 000	2015/04/09
Total number of employees	5 370	

With regard to the public sector, research conducted by Experian (2009) showed that central government has also been exposed to the negative effects of the global financial crisis. Although the public sector has been cushioned against the recession due to government investment and spending, high unemployment rates, falling revenues and the need for public spending cuts, forced local authorities to do more with less (Hopkins, 2009).

As government budgets have tightened in the aftermath of the Great Recession, Kopelman and Rosen (2016) state that increased scrutiny has been placed upon the compensation received by public sector workers. The majority of cost cuts mentioned in South Africa's 2016 budget review came from wage budgets in the public sector (Gedye, 2016). For example, although the budget review stated that further staff reductions are needed, the total number of public sector employees in provinces decreased from 920 826 in 2012 to just under 900 000 at the end of 2015 (Ensor, 2017; Gedye, 2017).

As a result of a deteriorating labour environment characterised by retrenchments and job losses in most sectors, South Africans view their environment as uncertain and unpredictable (Adcorp, 2016). The widespread economic recession could serve as an antecedent of a psychological recession, which is defined as an emotional state in which employees feel vulnerable and anxious about their futures (Bardwick, 2008).

A psychological recession is more intense than an economic cycle, as people who were retrenched due to cost-cutting may become depressed and anxious and confidence and optimism are replaced by fear (Bardwick, 2008). Evidence from European countries indicated a significant rise in suicides during the economic recession, with a total of more than 1 000 suicide-related deaths in the United Kingdom (UK) alone (Reeves, Stuckler, McKee, Gunnell, Chang & Basu, 2012).

Antoniou and Cooper (2013) surveyed a cohort of 10 000 shop floor managers to top management in the United Kingdom on their quality of working life during the economic recession.

The results revealed that, from 2007 to 2012, stress-related ill health increased by 20%, respiratory problems by 37%, digestive problems by 22%, and negative workplace behaviours such as avoiding contact with colleagues by 32% (Antoniou & Cooper, 2013).

Given the preceding discussion on the South African economic environment, there is evidence that a collective psychological recession could be evident among South African citizens. In organisations, poorly managed recessions may have a negative long-term impact on an organisation's human resources (Antoniou & Cooper, 2013).

Organisations therefore have to consider the emotional recovery and ongoing coping behaviour of their employees by developing their employees' psychological capital (PsyCap) (Conkright, 2011). Luthans, Youssef and Avolio (2007, p. 10) define PsyCap as "an individual's positive psychological state of development and is characterised by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success." Hope, self-efficacy, resilience, and optimism therefore emerge as important concepts related to PsyCap.

Various studies have shown that PsyCap contribute to decreased stress, increased work engagement, and job performance (Görgens-Ekermans & Herbert, 2013). This makes PsyCap important in an organisational context. On the other hand, a lack of PsyCap results in negative workplace behaviours such as cynicism and turnover intentions (Avey, Luthans & Youssef, 2010), and higher levels of stress, anxiety and reduced psychological well-being (Avey, Luthans & Jensen, 2009; Avey, Luthans, Smith & Palmer, 2010).

Human Resource (HR) departments are custodians of employees and should play a crucial role towards the development of employees' PsyCap.

According to Sonnenberg (2006) organisational-level variables such as Human Resource Management (HRM) practices can communicate to employees that the organisation values and recognises their contributions, cares for their well-being and invest in their development. HRM practices may therefore contribute towards the creation of a positive organisational environment, which in turn may create conditions necessary for PsyCap to flourish and develop (Luthans, Norman, Avolio & Avey, 2008).

The above discussion illustrates the need for a study of this nature, namely to investigate the impact of various HRM practices on PsyCap, as there has been no previous research studies investigating this relationship (Gupta, 2013). Therefore, the question that emerges is: How can South African organisations facilitate the development of PsyCap in employees, especially during a psychological recession and during other challenging periods, and specifically from a human resource management approach?

The above discussion provides the basis for the exploration of the main problem of the study.

1.2. MAIN PROBLEM

Which HRM practices will best contribute to the development of PsyCap in employees during a psychological recession?

1.3. SUB-PROBLEMS AND OBJECTIVES OF THE RESEARCH

Further examination of the main problem allows for the identification of the following theoretical and empirical sub-problems.

THEORETICAL SUB-PROBLEMS

SUB-PROBLEM ONE

How has South Africa been affected by the worldwide economic crisis and what are the associated social issues, which could contribute towards a psychological recession among South Africans?

SUB-PROBLEM TWO

What is the nature of a psychological recession and to what extent do South Africans experience a psychological recession?

SUB-PROBLEM THREE

What are the negative consequences of a psychological recession for the economy, organisations and the individual?

SUB-PROBLEM FOUR

What are the main components of PsyCap and how can organisations develop PsyCap?

SUB-PROBLEM FIVE

Is there a relationship between HRM practices and the development of PsyCap?

SUB-PROBLEM SIX

How can specific HR strategies or interventions contribute towards the development of employees' PsyCap?

SUB-PROBLEM SEVEN

Which bundle of HRM practices is most effective in buffering the negative impact of a psychological recession?

EMPIRICAL SUB-PROBLEMS**SUB-PROBLEM ONE**

To what extent is the target group experiencing the negative consequences associated with a psychological recession, including job insecurity, job loss and unemployment, organisational change and psychological uncertainty, work-family conflict, and work-related tension and psychological distress?

SUB-PROBLEM TWO

What is the impact of a psychological recession on the target groups' PsyCap, and specifically their hope, self-efficacy, resilience, and optimism?

SUB-PROBLEM THREE

To what extent do selected HRM practices foster the development of the target groups' PsyCap?

SUB-PROBLEM FOUR

Which bundle of HRM practices positively influences the development of the target groups' PsyCap during a psychological recession?

SUB-PROBLEM FIVE

Do HRM practices buffer negative experiences of a psychological recession?

The objectives of this study are therefore to investigate whether:

- South Africans are exposed to a psychological recession.
- A psychological recession negatively influences levels of PsyCap.
- HRM practices enhance employees' PsyCap.
- An optimal bundle of HRM practices that enhances employees' PsyCap can be identified.
- HRM practices serve as a buffer against negative experiences of a psychological recession.

1.4. THE CONTEXT AND SETTING OF THE RESEARCH

The study was located in the public health sector in South Africa and specifically aimed at Primary Health Care (PHC) facilities.

Worldwide, Human Resources for Health (HRH) is considered essential for the delivery of healthcare services and providing support to core health services. In this respect, the term HRH can be defined as all people who are engaged in actions with the primary intent to enhance health. These human resources include clinical staff such as nurses, physicians, pharmacists, and dentists, as well as management and support staff who do not directly deliver health services, but who are essential to the performance of the healthcare facility (World Health Organisation, 2009).

According to the Final Lab Report published by Operation Phakisa (2015), 82% of South Africans depend on the public health system, whilst only 30% of the HRH in the country are employed in the public sector.

Operation Phakisa is a change initiative that was launched in July 2014 by the South African government. “Phakisa” means “hurry up” in Sesotho, one of the South African indigenous languages, and is an intervention aimed at accelerating the National Development Plan, which targets national issues. Operation Phakisa is also aimed at implementing solutions pertaining to the South African PHC in all 3 507 PHC clinics across South Africa. One of the issues in health care is the distribution of health professionals in South Africa. (Operation Phakisa, 2015).

Figure 1.1 provides a graphical depiction of the distribution of health professionals in South Africa.

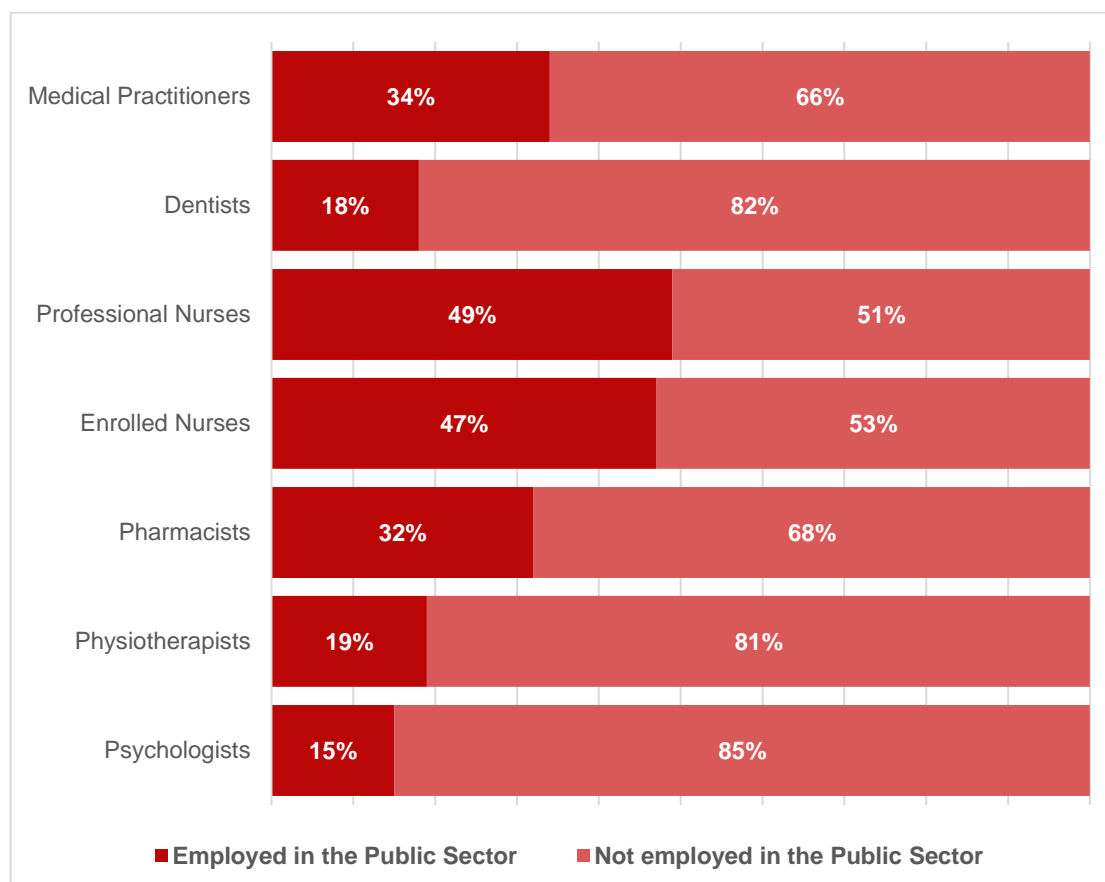


Figure 1.1: Distribution of health professionals in South Africa (Adapted from Operation Phakisa, 2015)

According to Figure 1.1, it is clear that South Africa's public health sector is severely under-resourced, and that PHC suffers from serious shortages of clinical and non-clinical staff.

For example, 21% of PHC clinics do not have a facility operational manager, 47% do not receive any doctor visits and 84% lack any input from a pharmacist or equivalent (Health Systems Trust, 2012). These shortages are especially a concern in rural areas, where employment gaps are up to 60% or even larger (Operation Phakisa, 2015). Furthermore, it is estimated that approximately 46 000 posts are vacant across the public health system (Operation Phakisa, 2015).

Based on the preceding discussion, a review of the South African PHC context revealed that PHC facilities are often plagued by vacant posts, budget constraints, deteriorating infrastructure, equipment and services, downsizing of staff establishments, freezing of posts, job insecurity, unsatisfactory working conditions, poor remuneration, lack of career progression prospects, low staff morale and job dissatisfaction, and an absence of effective organisational strategies to retain staff (Ashmore, 2013; Delobelle, Rawlinson, Ntuli, Malatsi, Decock & Depoorter, 2011; Department of Health, 2006; Harrison, 2009; Rispel, Angelides & Moorman, 2013; Strachan, Zabow & Van Der Spuy, 2011; World Health Organisation, 2009). The above stressors are fuelled by uncertainty, growing exasperation and vulnerability (World Health Organisation, 2009), which are key characteristics of a psychological recession and which provided the research setting for this study.

Kimberlin and Winterstain (2008) state that a research setting is the physical, social or cultural site in which the researcher conducts the study. Within this research study, the physical setting was all PHC clinics located within the West Rand District Municipality (WRDM). The research context and setting chosen for the study enabled the researcher to empirically observe and measure the variables related to PsyCap, within the context of a psychological recession.

1.5. DELIMITATION OF THE RESEARCH

Demarcating the research serves the purpose of making the research topic more manageable and providing a focus area.

1.5.1. Size of the organisation

This study was limited to **43** fixed Primary Health Care Clinics with a total staff headcount of **1 336** employees during the time of the study. Mobile health care clinics were therefore excluded from the study.

1.5.2. Type of organisation

The study was conducted at fixed PHC Clinics. According to the KwaZulu-Natal Department of Health (2001), a fixed PHC clinic refers to a facility from which a range of PHC-related services is provided, and that is normally open eight or more hours based on the need of the community to be served.

1.5.3. Geographical demarcation

The 43 PHC clinics targeted in this study were located within the WRDM. The WRDM is located on the South Western edge of the Gauteng Province of South Africa. These clinics are servicing communities located within four local sub-districts, namely Mogale City, Merafong City, Randfontein and Westonaria. Towns in the region include Krugersdorp, Randfontein, Westonaria and Carletonville.

1.5.4. Target employee groups and levels

The research sample was limited to all clinical and non-clinical staff employed at the participating PHC clinics within the WRDM. According to the National Department of Health (2015), the following ten core HRH categories are required at PHC clinics for the facility to function optimally:

- Facility operational manager
- Professional nurse/clinical nurse practitioner
- Enrolled nurses
- Cleaner
- Lay counsellor
- Admin clerk/data capturer

- Groundsman
- Security
- Pharmacy assistant

Since respondents were required to interpret a scientifically compiled questionnaire, only facility operational managers, professional nurses/clinical nurse practitioners, enrolled nurses, lay counsellors, admin clerks/data capturers and pharmacy assistants were included in the sample.

1.6. HYPOTHESES, CONSTRUCTS AND VARIABLES INCLUDED IN THIS RESEARCH STUDY

Given the foregoing introduction to the study, five broad hypotheses have been developed that are aligned with the main problem, sub-problems, and objectives of the present study:

- Hypothesis 1:** South African employees experience the negative effects of a psychological recession.
- Hypothesis 2:** A psychological recession negatively influences employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.
- Hypothesis 3:** HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.
- Hypothesis 4:** A bundle of HRM practices that enhances PsyCap can be identified.
- Hypothesis 5:** HRM practices buffer experiences of the negative impact of a psychological recession.

Table 1.2 provides a detailed breakdown of the main constructs and **14** associated research variables included in this study. **Two** independent constructs (Psychological recession, with **four** variables and positive HRM practices, with **six variables**) and **one** dependent construct (PsyCap, with **four** variables) have been identified for the present study. For clarification, the independent and dependent constructs are defined in the following section.

Table 1.2: Research constructs and variables (independent and dependent)

INDEPENDENT CONSTRUCTS	RESEARCH VARIABLES	
Psychological Recession	1	Job insecurity, job loss and unemployment
	2	Work-family conflict
	3	Organisational change and psychological uncertainty
	4	Work-related tension and psychological distress
Positive HRM Practices	1	Recognition practices
	2	Empowerment practices
	3	Competence development practices
	4	Fair rewards practices
	5	Information-sharing practices
	6	Employee wellness practices
DEPENDENT CONSTRUCT	RESEARCH VARIABLES	
PsyCap	1	Self-Efficacy
	2	Hope
	3	Resilience
	4	Optimism

1.6.1. Psychological recession (independent construct)

The impact of what has been described as the second worst economic recession has had a profound negative impact on the psychological well-being and therefore the PsyCap of people throughout the world. Due to major downsizing, increased levels of job insecurity, heavier workloads and longer working hours, employees become afflicted with a condition known as a psychological recession. With regard to the South African PHC context, HRH are confronted daily with the demands of an increased workload and insufficient facilities in the public healthcare sector in South Africa.

The context of the South African healthcare system is complex and fraught with resource and service delivery difficulties (Segnon, 2014). Furthermore, South Africa has a quadruple burden of disease consisting of HIV, AIDS and Tuberculosis; high maternal and child mortality; non-communicable diseases; and violence and injuries which exacerbates the shortage of HRH in the country (Segnon, 2014).

Since a psychological recession is defined as an emotional state in which people feel defenceless, hopeless, and anxious for their futures, these unique characteristics, working conditions and stressors, within the South African healthcare system may therefore produce a collective psychological recession among HRH at PHC facilities.

1.6.2. PsyCap (dependent construct)

PsyCap stems from both positive psychology and positive organisational behaviour (POB), with the focus being placed on contentment, well-being, human strengths and positive emotions (Weiten, 2004).

PsyCap, as stated in the introductory section, is defined by Luthans, Youssef and Avolio (2007, p. 10) as “an individual’s positive psychological state of development and is characterised by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success.” A psychological recession can inhibit the development of employees’ PsyCap, as employees are exposed to stressful work environments and experience feelings of alienation, helplessness and vulnerability. A psychological recession could result in lower levels of PsyCap.

1.6.3. HRM practices (independent construct)

Organisations can buffer the negative experiences of a psychological recession by developing the PsyCap of their employees through various HRM practices. Several researchers propose that a universally set of HRM practices positively influences organisational performance. These “bundles” of HRM practices are also referred to in the literature as “high-performance work systems”, “high commitment HRM” or “high-involvement HRM” (Marchington & Wilkinson, 2005).

For example, Pfeffer (1998) proposed the following bundle of HRM practices that may have the potential to improve organisational performance:

- Employment security;
- Selective hiring and sophisticated selection practices;
- Extensive training, learning and development;
- Employee involvement, information sharing and worker voice;
- Teamwork;
- Reduction of status differences; and
- Performance-based rewards

Several studies explored the relationship between these HRM practices and their ability to enhance organisational performance, lower absenteeism and labour turnover, and improve constructive employee attitudes and behaviours. Huselid (1995), for example, investigated the impact of HRM practices on labour turnover, productivity, and corporate financial performance. The results indicated that HRM practices have an economically and statistically significant impact on turnover and productivity.

Based on the preceding discussion, the author expected that HRM practices will optimise the development of employees' PsyCap and buffer the negative experiences associated with a psychological recession.

1.7. REASONS FOR AND SIGNIFICANCE OF THE RESEARCH

The negative impact of economic pressures has a profound psychological effect on the health and well-being of people in South Africa (Holmes, 2014). Bardwick (2008) states that many successful employed people have a depressive and fearful view, as job insecurity negatively influences their view of reality. This is because employees have seen, heard about, or read about individuals who have been retrenched and they are terrified that they may be next (Bardwick, 2008).

The question of how organisations can gain competitive advantage in today's turbulent global economy has many answers. However, traditional answers and resources are no longer sufficient (Luthans, Youssef & Avolio, 2007).

Investing in the development of employees' PsyCap can provide organisations with a sustained competitive advantage (Luthans, Youssef & Avolio, 2007). PsyCap has been shown to influence a wide range of work-related attitudes and behaviours such as job performance, well-being, stress, and absenteeism (Görgens-Ekermans & Herbert, 2013). Avey, Reichard, Luthans and Mhatre (2011) investigated the impact of PsyCap on various employee attitudes, behaviours and performance. Their findings indicated significant positive relationships between PsyCap and job satisfaction, psychological well-being, organisational citizenship behaviour and job performance (Avey, Reichard, Luthans & Mhatre, 2011).

Despite the existence of numerous studies conducted on PsyCap in many different contexts (Avey, Luthans & Jensen, 2009; Avey, Patera & West, 2006; Larson & Luthans, 2006; Luthans, Norman, Avolio & Avey, 2008), there is limited research that addresses PsyCap issues in South African situations (Pillay, Buitendach & Kanengoni, 2014).

In addition, there has been no systematic study of the impact of various HRM practices on PsyCap (Gupta, 2013). HRM practices have the potential to communicate to employees the organisation's investment in their growth and development, appreciation of their contributions and care for their overall well-being (Gupta & Singh, 2010). Increasing the four PsyCap components (i.e. hope, efficacy, resilience, optimism) in employees, may lead to employees realising that the organisation sees them as a crucial resource. They may start to feel hopeful about the future, optimistic about their careers and resilient about their ability to perform well in their jobs (Gupta & Singh, 2010), despite the current economic pressures and the daunting psychological recession.

Based on the preceding discussion, the present study argues that organisations can weather the negative impact of a psychological recession by strategically adjusting their HRM function, to foster an environment that is conducive to the development of employees' PsyCap.

The results of the study are therefore relevant to:

- Scholars in the field of Industrial Psychology, Psychology and HRM, who are concerned about the optimal development of people;
- Scholars in the field of Positive Organisational Scholarship (POS) and POB who believe that work experience characterised by abundance is possible;
- Scholars and practitioners in the field of change and organisational change who are concerned with adjustment and buy-in behaviour; and
- HR practitioners in health care services that are responsible for crafting effective HRM practices to support human development and excellence.

1.8. THE RESEARCH DESIGN

The following procedure was followed to achieve the goals of the research:

1.8.1. Literature study

A thorough literature study was conducted by investigating sources such as published, unpublished and electronic texts relevant to the topic being addressed in this study. The purpose of the literature study was to research contemporary thinking regarding the influence of various HRM practices on the development of employees' PsyCap, within the context of a psychological recession. The researcher found that current available research regarding the nature of a psychological recession was lacking. This prompted the researcher to explore this concept of a psychological recession and its meaning further and in more depth.

To address the theoretical sub-problems stated in section 1.3, the literature study focused on the following areas:

- The economic recession and its influence on organisations and consumers.
- Defining the concept of a psychological recession as a consequence of the economic recession.
- The nature and components of PsyCap.
- The nature of a psychological recession and its impact on employees' PsyCap.
- Positive outcomes of PsyCap on employees and organisations.
- The role of HRM practices as a buffer against a psychological recession.

- Integrated HRM practices as an organisational intervention to develop employees' PsyCap.

1.8.2. Empirical study

To address the empirical sub-problems stated in section 1.3, the researcher administered a scientifically developed questionnaire to employee groups and levels (specified in section 1.5.4) at all fixed PHC clinics located within the WRDM.

The questionnaire is structured in the following manner:

- Section A: Biographical data
- Section B: Psychological recession
- Section C: Positive HRM practices
- Section D: Psychological Capital Questionnaire (PCQ-24)

1.8.3. Population and sample

The target population consisted of all permanent and contract clinical and support staff working at 43 PHC clinics situated in the West Rand District Municipality of the Gauteng province of South Africa. A paper-based, self-administered questionnaire was made available to the target employee groups at all 43 participating PHC clinics.

1.8.4. Statistical methods

Descriptive and inferential statistical methods including Pearson's product moment correlation analysis, structural equation modelling (SEM), standard multiple regression analysis and a one-sample t-test were used for the analysis and interpretation of the data contained in the questionnaire. These methods are further unpacked in Chapter Five. The results obtained were presented and interpreted in Chapter Six after which recommendations were provided in Chapter Seven.

1.9. ORGANISATION OF THE REMAINDER OF THE STUDY

In **Chapter One**, the problem statement, delimitation of the research area, significance, study objectives and research methodology of the study were discussed.

In **Chapter Two**, an overview of the South African socio-economic landscape was provided. The declining economy as a consequence of the 2007 worldwide recession, as well as social issues affecting the well-being of South Africans was also considered. The nature of a psychological recession and the extent to which a psychological recession is prevalent in South Africa is further unpacked in **Chapter Three**.

Negative consequences associated with a psychological recession, and the role of the organisation in buffering the negative effects of a psychological recession are also discussed in detail.

In **Chapter Four**, the nature of PsyCap is explored in detail. The influence of a psychological recession on employees' PsyCap is also investigated. Attention is given to the role that HRM practices can play in developing employees' PsyCap. In **Chapter Five**, the design of the field of study is discussed and in **Chapter Six** the results of the study are presented and analysed. Final conclusions and recommendations are offered in **Chapter Seven**.

1.10. CONCLUSION

The aim of this chapter was to delineate the main problem to be addressed and to explain how the researcher will solve it. The remaining chapters aim to address the main and sub-problems. The main aim of the study was to identify HRM practices that contribute to PsyCap in employees during a psychological recession. In the following chapter, an overview of the South African socio-economic landscape is provided, with specific reference to the global financial crisis and various social issues that contribute towards the creation of a psychological recession among the population.

CHAPTER 2: THE SOUTH AFRICAN SOCIO-ECONOMIC ENVIRONMENT

2.1	INTRODUCTION	21
2.2	THE GLOBAL FINANCIAL CRISIS (2007-2009)	22
2.3	THE IMPACT OF THE GLOBAL FINANCIAL CRISIS ON THE SOUTH AFRICAN ECONOMY	23
2.4	THE SOUTH AFRICAN SOCIAL ENVIRONMENT	27
2.4.1	Unemployment.....	29
2.4.2	Labour unrest.....	31
2.4.3	Student protest action.....	34
2.4.4	Poverty.....	36
2.4.5	Crime	40
2.4.6	HIV/AIDS	43
2.4.7	Unethical behaviour	46
2.5	CONCLUSION.....	48

LIST OF TABLES

Table 2.1: Damages to universities as a result of student protests	36
Table 2.2: Poverty headcounts in 2006, 2009 and 2011	39
Table 2.3: National crime statistics for 2014-2015	41

LIST OF FIGURES

Figure 2.1: Social Progress Index Component-level Framework.	28
Figure 2.2: Trends in the number of work stoppages (2010-2014).	31
Figure 2.3: Trends in working days lost in South Africa (2010 – 2014).	32

CHAPTER 2: THE SOUTH AFRICAN SOCIO-ECONOMIC ENVIRONMENT

2.1 INTRODUCTION

As mentioned in Chapter One, economic crises are expected to produce a psychological recession, which is characterised by the prevalence of negative mental health effects. The World Health Organisation (WHO), for example, classified poverty, financial insecurity and social deprivation as major socio-economic risk factors for mental health problems and disorders (World Health Organisation, 2011). Discouraging economic news and an unstable socio-economic environment are major risk factors for mental health problems and a psychological recession (World Health Organisation, 2011). This view is supported by Roche (2007), who defines a psychological recession as emotional vulnerability felt by employees in the face of socio-economic hardship, leading to a cynical view of the present and a less optimistic view of the future.

As organisations operate in an open system model, external variables or events play a significant role in explaining what is happening within an organisation. The global economic crisis that started in 2007, for example has led to a significant decline in South Africa's economic activity, a rise in the unemployment rate, and an increasing number of people living in poverty (World Health Organisation, 2011). Many organisations were forced to implement cost-cutting strategies such as downsizing, retrenchments, outsourcing, leaner processes, mergers, acquisitions and joint ventures. As a result, these strategies have taken a psychological toll on employees and their families.

The "doom and gloom" caused by the economic recession contributes to a psychological recession, as news of retrenchments and failing organisations manifests itself in employees being more anxious, stressed and less innovative at work (Bardwick, 2008; Poisat & Theron, 2014). South Africa has experienced a series of negative events, which negatively affected the psychological state of the population.

While unemployment rates have risen, inequalities have deepened and the cost of living has increased as a result of constant petrol, electricity and food price escalations. South Africans have also lost faith and trust in the country's leadership to manage things on their behalf (Munusamy, 2013).

The violent nature of xenophobic attacks, the events at Marikana leading up to the massacre of 34 mineworkers and the Fees Must Fall student-led protests at South African universities perpetuate negative sentiment and a psychological recession among South Africans. To understand the nature of a psychological recession, it is therefore necessary to describe an economic recession and the various social issues, which South Africans are exposed to and confronted with on an ongoing basis. In this chapter, an overview of the South African socio-economic landscape is provided, with specific reference to the global financial crisis and various social issues, such as unemployment, labour- and student unrest, poverty, crime, HIV/AIDS and unethical behaviour.

2.2 THE GLOBAL FINANCIAL CRISIS (2007-2009)

The global financial crisis or global economic recession of 2007 affected the entire world economy, with greater detriment to some countries than others. In terms of overall impact, the International Monetary Fund concluded that it was the worst global recession since the Great Depression of the 1930's (Davis, 2009). The 2007 recession was triggered by a United States (US) subprime mortgage crisis, when lenders could no longer service their home loans. This financial crisis restrained banks from providing more loans to customers and therefore affected the general availability of money in the American economy, causing a ripple effect in consumer markets and the broader economy around the world (Yeoh, 2010).

The US Financial Crisis Commission (2011) compiled a comprehensive report on the causes of the financial and economic crisis. The Commission was established as part of the Fraud Enforcement and Recovery Act passed by Congress and signed by the President in May 2009.

The report cited the following conclusions about the causes of the global financial crisis of 2007-2008 (US Financial Crisis Commission, 2011):

- Leaders in the US financial system ignored warnings and failed to question, understand and manage financial risks.
- Widespread failures in financial regulation and supervision harmed the stability of the US financial markets.
- Dramatic failures of corporate governance and risk management occurred at important financial institutions.
- Excessive borrowing, risky investments and a lack of transparency characterised the financial market.
- The US Government was not prepared for the crisis.
- There was a breakdown in accountability and sound business ethics.

The collapse of what was generally described as “the housing bubble” was mainly due to low interest rates, inadequate regulation and ease of available credit, which made it easy for people who could otherwise not really afford it, to buy property. When the housing bubble burst, hundreds of billions of dollars in losses in mortgages negatively impacted financial markets and institutions. Wallison (2010) states that the US Government could be blamed for the financial crisis, as the Government created policies that engendered low quality and high-risk loans. Due to the US financial crisis, 26 million Americans lost their jobs, were unable to find full-time employment, or have given up looking for alternative employment. About four million American families lost their homes due to foreclosure (US Financial Crisis Commission, 2011).

2.3 THE IMPACT OF THE GLOBAL FINANCIAL CRISIS ON THE SOUTH AFRICAN ECONOMY

South Africa is the largest economy in Africa with abundant natural resources, well-developed legal, financial, communications, transport and energy sectors, a stock exchange ranked among the top 20 in the world and cutting-edge infrastructure supporting the efficient distribution of goods throughout the Southern African region (Madubeko, 2010).

The largest industries, as measured by the nominal value they added in the fourth quarter of 2015, were as follows (Statistics South Africa, 2015a):

- Finance, real estate and business services (20.7%)
- General government services (17.6%)
- Wholesale, retail and motor trade; catering and accommodation industry (16.3%)
- Manufacturing industry (13.3%)

South Africa has experienced strong economic growth since the abolishment of Apartheid and has been ranked by the World Bank as an “upper middle-income country” (South Africa.info, 2014). Between 1993 and 2007, South Africa’s GDP figures reflected an unprecedented 62 quarters (terms) of solid economic growth (South Africa.info, 2014).

South Africa, however, was also negatively affected by the 2007-2009 global economic crisis. Unlike other countries on the African continent, South Africa was at that stage significantly involved in international markets. The country fulfilled a key symbolic role in the emerging markets boom that contributed to a transformation in the global economy (Colombo, 2014). Given the level of its global engagement, South Africa entered the global recession of 2007 with a greater degree of vulnerability (Padayachee, n.d.) and was subsequently also negatively affected. As evidence, Padayachee (n.d.) reported that South Africa’s GDP rate dropped to 1.8% in the last quarter of 2008, then decreased to -6.4% in the first quarter and to -3.2% in the second quarter of 2009. Considering that a recession is characterised as a period of significant decline in activity across the economy (Investopedia, n.d.), this means that South Africa’s economy already fell into a recession at the end of the first quarter of 2009 (Padayachee, n.d.).

Madubeko (2010) investigated the impact of the global financial crisis on the South African economy, by developing an index, which described the financial conditions of the South African economy. Three variables were used to build the financial index, namely real short-term interest rate, changes in real effective exchange rate and changes in the stock exchange index.

The compiled index indicated that South African financial conditions have deteriorated substantially as a result of the global financial crisis. Furthermore, the results of the study indicated that the global recession substantially slowed down economic growth in South Africa (Madubeko, 2010). As the study by Madubeko was conducted in 2010, the results hinted that slower economic growth could be predicted for the years following the study. Subsequently, News24 (2014b) also reported that the South African economy again fell into a recession in the first quarter of 2014 (News24, 2014b), as economic growth contracted by a further 0.6% in this quarter (Statistics South Africa, 2014b).

This economic contraction was mainly due to labour unrest at platinum mines, which curbed manufacturing production that relied on platinum. The cause of the unrest at the platinum mines was also of an economic nature, with employees striking and demanding a salary increase ranging from R5 000 to R12 000 per month (Solomons, 2014). Between 2004 and 2007, South Africa experienced an average growth rate of approximately 5%. Between 2008 and 2012, however, an average growth rate of just above 2% was recorded, mainly due to the impact of the global economic recession. Subsequently the World Bank adjusted their prediction for South Africa's growth from 2.7% to 2%. This expectation for slower growth was mainly attributed to tighter monetary policy, increased labour unrest and unstable electricity supply (Maswanganyi, 2014a). In February 2016 the World Bank warned that South Africa risked another recession due to a decline in commodity prices, a weakening demand from China, power shortages, regulatory uncertainty and the worst drought in more than a century (Penelope, 2016).

The collapse of the global economy had negative consequences for South African households as a result of unemployment and poverty which followed the shrinkage of business. In regard to labour market conditions, 484 000 employees lost their jobs in the third quarter of 2009 (Padayachee, n.d.). This increased the official unemployment rate from 23.6% in the second quarter to 24.5% in the third quarter (Padayachee, n.d.).

Considering that 1.6 million workers had been excluded from the above calculations as they have ceased to actively seek alternative employment (i.e. discouraged work seekers), the unemployment rate in real was estimated at 32% (Padayachee, n.d.).

South African consumers and organisations have been negatively affected by the global economic recession as they have to carry the burden of rising costs, interest rates and inflation. This was evident in the Consumer Price Index (CPI), which is used to measure inflation by tracking the prices of goods and services purchased by consumers (Statistics South Africa, n.d.). According to the May 2014 CPI report, the inflation rate was the highest in almost five years (Vollgraaff, 2014). Price pressures remained elevated in 2014 as fuel and electricity costs increased.

Due to continuous inflation, households battle with high debt levels and increasing administered costs such as electricity, petrol and transport. Household spending is important for the economy as it accounts for 61% of the total spending of South Africa's GDP (Maswanganyi, 2014b).

As the inflation pressure on consumers is increasing, consumer spending, however, slows down and therefore also the economy. This has specific consequences for a country such as South Africa, which is considered an emerging economy. An emerging economy is largely driven by consumer spending and if consumers are under pressure, it slows down economic growth (Finance24, 2013).

Based on the preceding discussion, it is clear that South Africa has been negatively affected by the global financial and economic crisis. According to Padayachee (n.d.), a major problem for South Africa has been the slowing growth of employment, an area of the real economy that has been in crisis in the post-1994 era. The following section focuses specifically on the South African social environment and social issues affected by the economy.

2.4 THE SOUTH AFRICAN SOCIAL ENVIRONMENT

The economy and social issues are interrelated, as is also reflected in the open systems approach mentioned in the introduction to this chapter. Social issues have a negative impact on a country's GDP. A research study conducted by KPMG, for example, found that gender-based violence costs the South African economy between R28.4 billion and R42 billion per year (KPMG, 2014). In building a robust economy, addressing social issues should be seen as a top priority.

The Social Progress Index (SPI), shown in Figure 2.1, is a tool that is used to measure national social and environment performance. This measurement defines social and environmental progress or outcomes based on 54 indicators (Porter, Stern & Green, 2014). The framework and methodology were developed over a two-year period with the input of a wide range of scholars and policy experts (Porter, Stern & Green, 2014).

The SPI index report defines "social progress" as the capacity of a society to meet the basic human needs of its citizens, establish the building blocks that allow citizens and communities to enhance and sustain the quality of their lives and create the conditions for all individuals to reach their full potential (BusinessTech, 2015d).

According to the 2014 SPI, South Africa was ranked 69th out of 132 countries evaluated. South Africa fared poorly on Foundations of Wellbeing (67.49, 71st) and even more poorly on the Basic Human Needs component (60.20, 94th) (Porter, Stern & Green, 2014). Foundations of Wellbeing measures whether a population has access to basic education and healthcare and can live healthy lives, whereas the Basic Human Needs component assesses how well a country provides for people's essential needs. This dimension also measures whether people have enough food to eat and whether they feel safe and secure (Porter, Stern & Green, 2014). According to the 2015 SPI results, South Africa ranked 63rd out of 133 countries in terms of social progress, a slight improvement on the 2014 ranking.

The report described South Africa as a “lower-middle social progress” level with an index score of 65.64 (BusinessTech, 2015d).

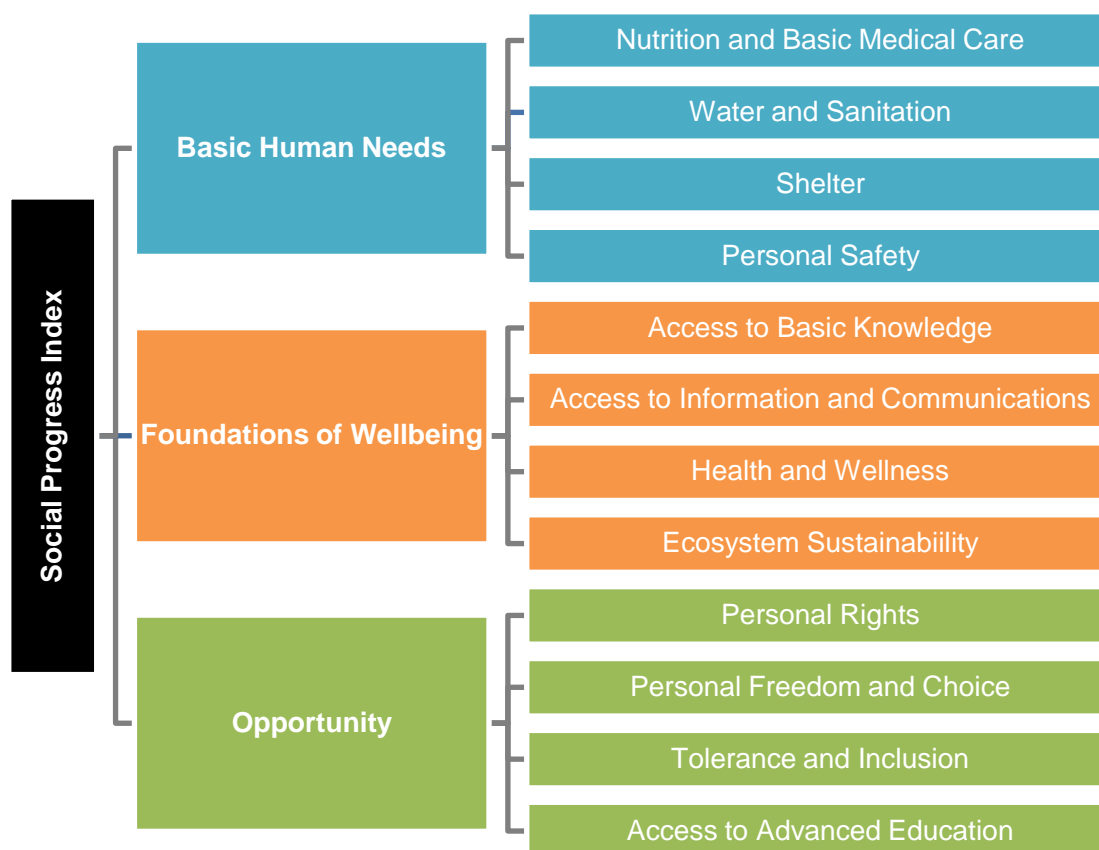


Figure 2.1: Social Progress Index Component-level Framework (Adapted from Porter, Stern & Green, 2015).

Despite this improvement, South Africa still ranked poorly on basic human needs (ranked 92nd overall), especially in terms of personal safety, in which case it was ranked 129th (BusinessTech, 2015d). This finding reflects high levels of violent crime, a high homicide rate and 31.9 traffic deaths per 100 000 of the population (Porter, Stern & Green, 2015).

According to the report, the findings is a legacy of Apartheid, since basic infrastructure was inadequate and public investments were not made necessary for the majority of the population. The data further revealed that investments since 1994 have not been sufficient (Porter, Stern & Green, 2015).

Based on the above discussion, it is clear that South Africa experiences a variety of social progress deficits.

As mentioned in the introduction to this chapter, social issues negatively affect the psychological state of the population, contributing to a psychological recession, as news of high unemployment rates, labour unrest, crime and unethical leadership manifests itself in people being more stressed, anxious and vulnerable.

The next section expands on specific social issues, which South Africans are exposed to.

2.4.1 Unemployment

High unemployment remains persistent in the South African labour market, as a result of the continuing global economic crisis and also a decline in the mining sector. In South Africa, the Quarterly Labour Force Survey (QLSS) conducted by Statistics South Africa serves as a measure of the labour market activities of South Africans aged 15 years and above. According to the survey report, between quarter 4 (2013) and quarter 1 (2014), the number of unemployed persons increased by 237 000 (Statistics South Africa, 2014d). Discouraged work seekers, referring to individuals who have lost hope of finding employment, increased by 154 000 (Statistics South Africa, 2014d).

In 2016, joblessness in South Africa has reached the highest level since 2008, the first time the survey was conducted. Joblessness reached 26.7% in the first quarter of 2016 (Statistics South Africa, 2016a). This percentage translates to 5.714 million people without jobs in the first quarter, compared to 5.2 million in the fourth quarter of 2015 (Masutha, 2016). The report revealed that over 355 000 jobs were lost in the fourth quarter (Statistics South Africa, 2016a).

During 2014 South Africa experienced the highest retrenchment rate in ten years (Maswanganyi, 2014c). This finding was highlighted by the February 2014 Adcorp Employment Index.

According to the report, the South African economy shed 118 397 jobs during February 2014. This was the biggest monthly loss in three years (Adcorp, 2014a). As South Africa is very involved in global trade, the global economic crisis saw the economy lose one million jobs (Maswanganyi, 2014d). An employment outlook survey conducted by ManPower Group, an HR Consulting Firm, which measures employers' intentions to increase or decrease the number of employees in their workforces indicated less opportunities for South African job seekers in 2014, due to strikes, labour unrest and the global recession (ManPower Group, 2014).

The high unemployment rate, as noted above, could be attributed to a lack of proper education and training. According to the 2013-2014 Global Competitiveness Report, one of the most considerable challenges for South Africa was to build a skilled labour force to create sufficient employment (Schwab, 2014). This view was supported by the 2012-2013 Job Opportunities and Unemployment Report compiled by the Department of Labour, which highlighted a lack of education and suitable skills as characteristic of most of the unemployed people in South Africa (Molapo, Mutedi & Muthethwa, 2013). South Africa was ranked 146th out of 148 economies on the overall quality of its educational system and specifically concerning low primary and tertiary enrolment rates (Schwab, 2014).

In the context of a psychological recession, high unemployment rates have a negative impact on the employed cluster of the population. High unemployment rates, for example predict anticipated economic distress, as the probability that an employee may experience unemployment in the future increases (Luechinger, Meier & Stutzer, 2008).

In conclusion, high rates of unemployment negatively affect the subjective wellbeing of the working population, as a large body of literature highlights the importance of self-reported job security on individuals' wellbeing (De Witte, 1999; Green, 2006).

2.4.2 Labour unrest

South Africa has the highest rate of violent and protracted strikes (Sharp, 2014). According to data collected and analysed by the Department of Labour, South Africa experienced 88 strikes in 2014, which cost the country's economy R6.1 billion (BusinessTech, 2015c). Figure 2.2 shows the trends in the number of work stoppages in South Africa between 2010 and 2014.

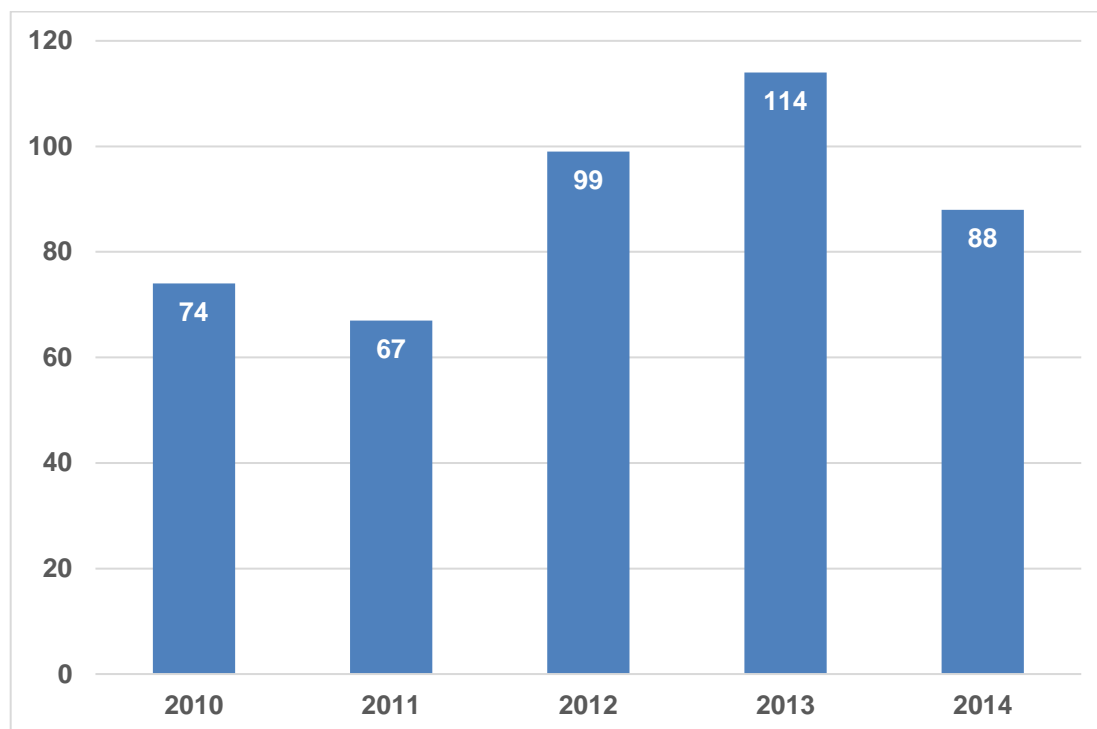


Figure 2.2: Trends in the number of work stoppages (2010-2014)
(Adapted from the Department of Labour, 2014).

Figure 2.2 shows that work stoppages were characteristic of the South African work environment and that a peak was experienced in 2013. Figure 2.3 shows the trends in working days lost as a result of work stoppages for the 2010-2014 period. According to Figures 2.2 and 2.3, in 2014 approximately 88 strike activities were recorded with 10 264 775 working days lost, while in 2013, 114 strikes were recorded with 1 847 006 working days lost (Department of Labour, 2014). The Department of Labour's strike report showed that although fewer strikes were recorded in 2014, these strikes lasted for longer periods resulting in more working days and hours lost.

Strikes in the mining industry accounted for 94% of working days lost (Department of Labour, 2014). The majority of strikes were over wages, bonuses and compensation and took place mostly in the community, social and personal services industry, followed by the manufacturing industry (BusinessTech, 2015c).

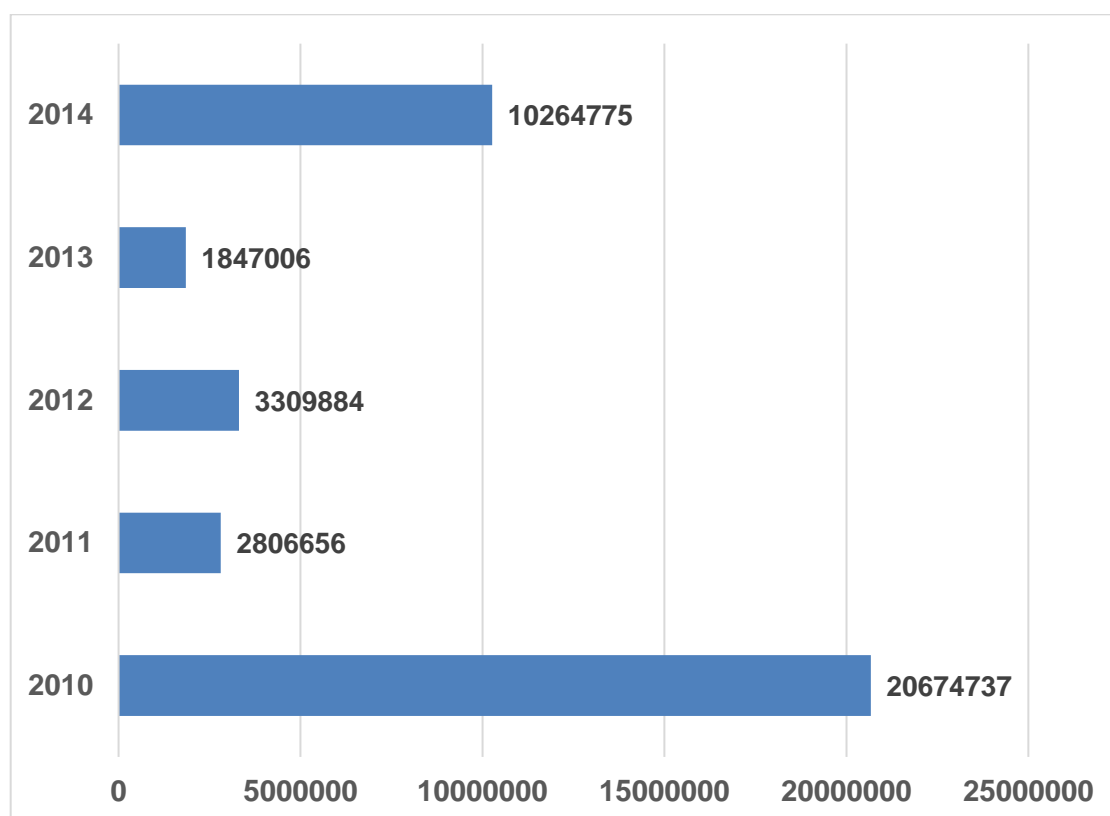


Figure 2.3: Trends in working days lost in South Africa (2010 – 2014)
(Adapted from the Department of Labour, 2014).

A recent incident that made national and international headlines were the strike and protest action at the Lonmin Mine in Marikana. On 16 August 2012 the South African Police Service (SAPS) opened fire on a crowd of striking mineworkers at Marikana, and shot dead 34, wounded 78 and arrested more than 250 of the mineworkers (Twala, n.d.).

The manifest unrest at the Lonmin mine already began on 10 August 2012, when more than 3 000 miners downed their tools. The build-up to the Lonmin Mine massacre was, according to reports, marked by intimidation and incidents of assault.

Among others, ten people were killed as violence escalated between members of the National Union of Mineworkers (NUM) and the Association of Mineworkers and Construction Union (AMCU) (South African History Online, 2013). According to an official SAPS press release, on 16 August 2012 up to 3 000 drill operators armed with machetes and sticks and some with firearms, ignored orders by the SAPS to disperse (Aljazeera, 2012). According to reports, police officers were attacked by the group of mineworkers, using a variety of weapons. The press release stated that the police, in self-defence, retaliated with force (Aljazeera, 2012). The events at Marikana took shape against a backdrop of high unemployment, poor public service delivery and overall socio-economic inequalities (Twala, n.d.). As a result of the incident at Marikana, the Lonmin Mine was unable to meet its full-year production target of 750 000 ounces of platinum (IOL News, 2012).

During January 2014, all platinum producers received notice from AMCU about strike action. This strike affected 40% of the global production of metal used in automobiles and dragged the South African economy into contraction in the first quarter, as R24 billion was lost in revenue as a result of the strike (Mail & Guardian, 2014). The AMCU strike took 156 days before it was finally settled on 24 June 2014. A few days after the AMCU strike was resolved, the National Union of Metalworkers of South Africa (NUMSA) embarked on a month-long strike. Workers demanded a salary increase of 12%, a R1 000 housing allowance and a total ban of labour brokers (Finance24, 2014a). At the height of the four-week NUMSA strike, the South African Chamber of Commerce and Industry claimed that the economy lost over R300 million daily as a result of the strike (Sidimba, 2014).

Mining is a very important economic activity to South Africa. In 2009 mining contributed 8.8% directly and 10% indirectly to the country's GDP, sustaining approximately one million jobs and creating roughly 10.5 billion rand in corporate tax receipts (Van der Schyff, 2012).

Intense labour unrest had a significant negative impact on the South African economy. The manufacturing sector weakened (Maswanganyi & Hedley, 2014) and according to Statistics South Africa (2014b), the GDP for the first quarter of 2014 declined by 0.6%.

The GDP report further revealed that the mining sector contracted by nearly 25% and the manufacturing sector by 4.4% (Statistics South Africa, 2014b). Regarding unemployment, the June 2014 Adcorp Employment Index revealed significant job losses in the mining (-2 000) and manufacturing (-15 000) sectors (Adcorp, 2014b).

The labour unrest experienced in South Africa took place in the context of difficult economic conditions at both a global and national level and impacted negatively on poor working people as a result of inflation (Department of Labour, 2014). High electricity and petrol prices and the high cost of living all contributed to the demand for higher wages. As a result, it was expected that industrial action and labour unrest were likely to persist.

2.4.3 Student protest action

The current uncertain environment was also influenced by the Fees Must Fall (FMF) movement that disrupted academic activities at universities across South Africa. The FMF movement was an apparent student-led protest, that began in mid-October 2015 in response to increases in tuition fees at South African Higher Education Institutions (HEIs) and specifically universities. The protests started at the University of the Witwatersrand (Wits) and also spread to the University of Cape Town, University of Pretoria and Rhodes University, before rapidly spreading to other South African universities (Nicolson, 2016). The 2015 student protests ended when President Jacob Zuma announced that fees would not be increased at tertiary institutions for the 2016 academic year (Nicolson, 2016).

The activities of the FMF movement was re-ignited in September 2016 when the South African Minister of Higher Education, Blade Nzimande, announced that fee increases would be capped at 8% in 2017 (BusinessTech, 2016).

Each university, however, was given the freedom to decide by how much their fees would increase (BusinessTech, 2016). The FMF protest action negatively affected the financial position of several South African HEIs (BusinessTech, 2016; Govender, 2016). Statistics South Africa (2016b) revealed that 12 out of the 26 South African HEIs showed a net cash deficit in 2015 (Statistics South Africa, 2016b). Tuition fees, which was the central issue of the FMF campaign, accounted for 34% of all money universities receive and amounted to R21.5 billion in 2015 (BusinessTech, 2016).

The disruptions at universities posed broad consequences for many stakeholders. According to Mashego (2016), a potential of 7 000 first-year students would not have been able to register at Wits in 2017 if the university decided to cancel the 2016 academic year. The lost year would also result in newly qualified teachers, doctors, lawyers and accountants being unable to enter the job market as they would not have written their professional board exams. Students who relied on financial aid, scholarships and bursaries also faced an uncertain future, as they risked forfeiting their funding if they did not successfully complete the 2016 academic year (Mashego, 2016).

In many cases, FMF protesters caused damage to university property, through arson, looting and vandalism (BusinessTech, 2016; Govender, 2016; Kekana, Isaacs & Corke, 2015). Gqirana (2016) reported that in April 2016 alone, the FMF protests resulted in over R300 million in damages to university property. Table 2.1 provides a breakdown of the damages, which resulted from the student protests.

The FMF protest action was spurred by community inequalities evident in the South African socio-economic landscape. According to Gida (2015) the wave of student protests was far more than simply a monetary problem, as the protest action brought to the surface glaring inequalities between the majority of poor South Africans and the minority taxed citizens. The FMF protests also presented an example of how violence repeats itself when a state neglects reconciliation and transformation (Gida, 2015), as inequality has disturbingly increased since the fall of Apartheid in 1994.

Table 2.1: Damages to universities as a result of student protests
(Adapted from Gqirana, 2016)

UNIVERSITY	TOTAL DAMAGES
University of Stellenbosch	R 352 000
North West University	R 151 000 000
University of Limpopo	R1 786 294.52
University of Johannesburg	R 345 000
University of the Western Cape	R 46 544 446
Walter Sisulu University	R 351 287.19
Tshwane University of Technology	R 5 073 747.73
University of KwaZulu-Natal	R 82 000 000
Cape Peninsula University of Technology	R 689 850.14
University of Cape Town	R 3 200 000
University of Zululand	R 4 500 000
Rhodes University	R 250 000
University of the Witwatersrand	R 1 410 223
University of the Free State	R 2 800 000
TOTAL COST	R 300 302 848.58

South Africa, by many measures, is considered the most unequal society in the world. National statistics published by Statistics South Africa in 2014 showed, for example, that on average, the top 10% of wage earners earns 90 times more in wages than the bottom 10% (Statistics South Africa, 2014e). Inequality, measured by the Gini coefficient (a measure in which 0 is perfect equality and 1 perfect inequality), was a staggering 0.66 (Baloyi & Isaacs, 2015; Statistics South Africa, 2014e).

2.4.4 Poverty

Poverty has progressively become a problem in most societies (Bezuidenhout, 2005). In South Africa, eradicating the legacy of poverty and underdevelopment is a central focus of the current ANC-led government. According to Bezuidenhout (2005), poverty can be defined as either absolute or relative:

- **Absolute poverty** categorises society into the poor and the non-poor.
- **Relative poverty** is a more subjective approach as people are considered poor if they experience poverty relative to the rest of the population.

In South Africa, relative poverty receives much attention due to perceived and observed differences in wealth between whites and other racial groups, as well as between different classes within society. To address these differences, the South African government has introduced legislation, such as the amended Broad-Based Black Economic Empowerment Act and the Employment Equity Act to address poverty and inequality, and transform the ownership, management and control of the economy (SouthAfrica.info, 2014).

As is the case with many social phenomena in society, Bezuidenhout (2005) states that it is difficult to determine a single causative factor for poverty. While a number of causative factors are discussed below, it is important to note the collective and interactive impact of these factors (Bezuidenhout, 2005):

- **Poor health:** Employees that are absent from work as a result of ill health might experience a reduced level of income, especially if they are paid an hourly rate. Should an employee eventually lose his or her job, the family may find it difficult to make ends meet.
- **Work-related factors:** Strikes, dismissals and retrenchments may adversely affect the financial security of employees. The problem is not only limited to employees in lower income brackets, but also affect higher earners who lose their financial security as a result of business failure or stock market crashes.
- **Environmental factors:** Droughts, excessive rain and flooding, fires and other environmental factors may reduce the income potential of the farming community. The scarcity of agricultural products may contribute to food price escalations, making it difficult for lower income groups to purchase such products. Over a long period of time, such individuals or families may find it difficult to maintain an adequate standard of health.
- **Industrial and non-industrial accidents:** Work-related accidents may not only affect an individual's employability, but also reduce the level of income of the employee and his or her family.

- **Absence of the breadwinner:** Families may become impoverished when the sole breadwinner disappears without a trace or dies. The families most at risk are those in which the mother does not earn an income and the family's income is insufficient to meet their needs.
- **Substance abuse:** Families may find themselves becoming gradually impoverished when a substance-abusing parent uses the family income to maintain his or her habit. Furthermore, the substance abuser may lose his or her employment, bringing a further decrease in the family's means.
- **Education and training:** Employees with a low standard of education and training are often the first to be retrenched during an economic recession. Furthermore, these workers are also unable to compete for a higher paid job.
- **Size of the family:** Large, impoverished families may find it difficult to maintain a sustaining healthy lifestyle.
- **War and other forms of violence:** War impoverishes a society as a whole as it leads to the destruction of the natural environment in which people have to live and earn a living.
- **Illegal immigrants:** Illegal immigrants in a society aggravates the problem of unemployment and poverty, as they compete with the local inhabitants for jobs and other means of procuring an income, such as street vending.

As mentioned, poverty is a complex social phenomenon caused by a number of interdependent factors, which are specifically evident in South Africa (Bezuidenhout, 2005). The living conditions survey (LCS) and the Income and Expenditure Survey (IES) conducted by Statistics South Africa are the two primary measures used for determining absolute poverty and inequality over time (Statistics South Africa, 2014c). Table 2.2 shows South Africa's poverty headcounts in 2006, 2009 and 2011. According to Table 2.2, poverty levels in South Africa have dropped from 57.2% in 2006 to 45.5% in 2011. In 2011, 23 million people in South Africa were considered poor. It is also evident from Table 2.2 that the percentage of the population living in extreme poverty increased from 26.6% in 2006 to 32.4% in 2009.

This could be evidence of the impact of the 2009 global financial crisis on South Africans. This figure improved again in 2011, with 20.2% of people recorded as living in extreme poverty.

Table 2.2: Poverty headcounts in 2006, 2009 and 2011 (Adapted from Statistics South Africa, 2014c)

POVERTY HEADCOUNTS	2006	2009	2011
Percentage of the population that is poor	57.2%	56.8%	45.5%
Number of poor persons (millions)	27.1	27.8	23.0
Percentage of the population living in extreme poverty	26.6%	32.4%	20.2%
Number of extremely poor persons (millions)	12.6	15.8	10.2

According to the 2013 General Household Survey (GHS), self-reported hunger decreased from 29.3% to 13.4% in 2013. Since 2011, the percentage of South Africans who experienced hunger increased by +0.3% to 13.4% (Statistics South Africa, 2013). Irrespective of some improvement in the conditions of the most vulnerable people in the South African community, it is clear that the South African community was largely afflicted by high levels of poverty.

According to Statistics South Africa (2013), an estimated one million jobs were lost as a result of the global financial crisis. Approximately 90% of these job losses occurred during the time data was collected for the LCS 2008-2009, from which some of the figures above were derived. These findings suggest that a lack of employment opportunities and the consequential income disparity contributes to mass poverty in a developing economy such as South Africa. When there are individuals in a society who can work, but who are unable to do so as there are not sufficient jobs, it contributes towards a wasted workforce (Bezuidenhout, 2005).

As the impoverished are unable to pay personal taxes, affluent South Africans carry the burden of assisting the Government in providing various services for the poor.

The 2013 GHS recorded an increase from 12.7% in 2003 to 30.2% in 2013 in the percentage of individuals benefiting from social grants (Statistics South Africa, 2013). According to Ferreira (2015), the number of social grants recipients in South Africa have increased from an estimated four million in 1994, to 16.3-million by August 2015.

Based on the preceding discussion it is evident that poverty not only influences the lives of the poor, but also the non-poor. The effects on the poor may be life threatening, while the non-poor experience an additional financial burden as they need to assist the state in providing various services to the poor (Bezuidenhout, 2005).

2.4.5 Crime

South Africa has a high rate of crime. Selected crime statistics, presented in Table 2.2 below, are evidence of this. The threat of crime creates a climate of anxiety and fear and limits people in their day-to-day activities. In South Africa, crime is considered as a consequence of rapid urbanisation, ineffective policing, the inadequate deterrent value of the South African penal system, smuggling networks and political instability (Bezuidenhout, 2005). According to Bezuidenhout (2005) the SAPS distinguishes between five types of crime:

- **Violent crime** – Murder, attempted murder, arson, malicious damage to property and robbery with aggravating circumstances.
- **Property-related crime** – Burglary, stock theft, vehicle theft and theft out of or from motor vehicles.
- **Crime related to the social fabric** – Rape, assault with the intent to inflict grievous bodily harm, common assault and crimes against children.
- **Organised crime** – Syndicates, technology-related crimes, smuggling, drug trafficking, illegal immigrants, endangering protected species and diamond and gold-related crimes.
- **Commercial crime** – Illegal transfer of capital to foreign countries, money laundering and distribution of counterfeit currency.

According to IOL News (2013), violent crime is damaging the South African economy due to a loss of productivity and foreign investment.

Table 2.3 presents national crime statistics for the 2014 to 2015 financial period.

Table 2.3: National crime statistics for 2014-2015 (Adapted from SAPS, 2015)

CRIME CATEGORY	NUMBER OF CRIMES COMMITTED
Contact Crimes	
<i>Murder</i>	17 805
<i>Total Sexual Offences</i>	53 617
<i>Attempted murder</i>	17 537
<i>Assault with the intent to inflict grievous bodily harm</i>	182 556
<i>Common assault</i>	161 486
<i>Common robbery</i>	54 927
<i>Robbery with aggravating circumstances</i>	129 045
Total	616 973
Contact-related Crimes	
<i>Arson</i>	5 127
<i>Malicious damage to property</i>	120 662
Total	125 789
Property-related Crimes	
<i>Burglary at non-residential premises</i>	74 358
<i>Burglary at residential premises</i>	253 716
<i>Theft of motor vehicle and motorcycle</i>	55 090
<i>Theft out of or from motor vehicle</i>	145 358
<i>Stock-theft</i>	24 965
Total	553 487
Crime Detected as a Result of Police Action	
<i>Illegal possession of firearms and ammunition</i>	15 116
<i>Drug-related crime</i>	266 902
<i>Driving under the influence of alcohol or drugs</i>	68 561
<i>Sexual offences detected as result of police action</i>	6 340
Total	356 919
Other Serious Crimes	
<i>All theft not mentioned elsewhere</i>	360 541
<i>Commercial crime</i>	67 830
<i>Shoplifting</i>	71 327
Total	499 698
Subcategories of Aggravated Robbery	
<i>Carjacking</i>	12 773
<i>Truck hijacking</i>	1 279
<i>Robbery at residential premises</i>	20 281
<i>Robbery at non-residential premises</i>	19 170
Total	53 639

About R68 billion in tax money is spent annually on the SAPS (IOL News, 2013). The Crime Statistics Series Report compiled by Statistics South Africa indicated that South Africa experienced an estimated 2.1 million cases of serious crimes in the 2011-2012 financial year (Statistics South Africa, 2014a). According to the 2014-2015 national crime statistics compiled by the SAPS, a total of 2.206 million crimes were committed during this period (BusinessTech, 2015a).

The above statistics paint a negative outlook for crime in South Africa. BusinessTech (2015a) reported that of the 27 crime categories presented in the SAPS data, only 11 categories showed a decrease in reported criminal activity from 2014 to 2015. South Africa was ranked ninth in the United Nations Global Study on homicides (Roane, 2014), with 31 murders per 100 000 people in 2012 (United Nations Office on Drugs and Crime, 2013).

Crime has a profound negative influence on South Africans' psychological wellbeing (Ferraro, 1995). High levels of crime create a fear of victimisation. This can be understood as the "fear of crime", which is an emotional reaction of dread or anxiety to crime or the symbols that a person associates with crime (Ferraro, 1995).

Fear of crime is relatively high among South Africans, as many South Africans believe that crime is out of control (Baghel, 2010). Baghel (2010) further states that crime was not only an important consideration for South Africans, but also an obsession, as people continuously conversed about crime. According to this author, anxiety about becoming a victim of crime result in feelings of insecurity, erode people's wellbeing, restrict freedom of movement and encourage defensive and wary behaviour (Baghel, 2010).

Louw (1998) gathered information about the nature and extent of fear of crime among residents in Pretoria, the capital city of South Africa. The results of this study indicated that the respondents felt very unsafe at night (50%) and a further 19% felt unsafe in general. For this study, a total of 2 547 interviews were conducted with residents in the city.

A 2014-2015 Victims of Crime Survey conducted by Statistics South Africa, showed a general fear among people of visiting open spaces or parks when alone (Statistics South Africa, 2015c). In addition to these findings, the majority of the respondents indicated that both violent and non-violent crimes had increased in their areas of residence between 2011 to 2014 (Statistics South Africa, 2015c). These findings indicate that crime instils fear among people and limit them in their day-to-day activities.

In the light of the high crime statistics discussed in this section, the prevalence and under-reporting of crime incidents to the SAPS remain a major concern in the country (Statistics South Africa, 2015c). Crime statistics are questioned due to unaudited SAPS data and widespread mistrust of the SAPS itself (BusinessTech, 2015a). More accurate crime statistics are required for the formulation, implementation and monitoring of strategies for crime prevention and management (Statistics South Africa, 2015c).

2.4.6 HIV/AIDS

HIV/AIDS is a pandemic affecting people in all spheres of life. The continued stigma associated with HIV/AIDS often makes it traumatic for both the affected individual and members of the family. South Africa was ranked first in HIV incidence in the world (Malan, 2014), with 6.19 million people (11.2%) living with HIV (Statistics South Africa, 2015b).

Booyesen, Bachmann, Matebesi and Meyer (2004) investigated the socio-economic impact of HIV/AIDS on households in South Africa. The results of their study indicated that households affected by HIV/AIDS were more vulnerable socially and economically and were at a disadvantage compared to non-affected households. Furthermore, economically active people in HIV-affected households were more likely to be unemployed (Booyesen, Bachman, Matebesi & Meyer, 2004). The impact on the family's income was detrimental, since HIV/AIDS was most prevalent among age groups generally responsible for providing the family's main income (Bezuidenhout, 2005).

HIV/AIDS has a profound negative impact on organisations. For organisations, the HIV epidemic is likely to result in increased costs and declining productivity (United Nations Department of Economic and Social Affairs, 2004). The United Nations Department of Economic and Social Affairs (2004) reported that HIV/AIDS affect organisations in the following ways:

- AIDS-related deaths result in lower productivity, since these deaths are more likely to occur mainly among workers in their most productive years. As a result, younger, less experienced workers fill positions previously held by skilled, experienced workers.
- Organisations lose highly valuable, accumulated talent when skilled workers who occupy crucial positions become sick or die from AIDS.
- Organisations who have comprehensive assistance programmes and health programmes may find themselves responsible for substantial medical costs. As a result, the medical aid scheme of the organisation may become more expensive as schemes have to increase the costs of coverage.
- Employees may also suffer from low morale and productivity as co-workers become ill and eventually die.
- Due to the impoverishment of households as a result of HIV/AIDS, a decline in the demand for some types of goods may occur. Organisations producing these goods may find themselves with a shrinking market.

The United Nations Department of Economic and Social Affairs (2004) reported that HIV/AIDS affects the education sector in the following three ways:

- The supply of experienced teachers will be reduced by AIDS-related illness and death;
- Children will not be able to attend school as they are needed at home to care for sick family members; and
- Children will drop out of school due to reduced household income as family members die of an AIDS-related death.

In addition, Bezuidenhout (2005) states that the school population is expected to reduce dramatically as more children are taken out of schools so that they can care for their families, or take the responsibility of managing the family.

In high HIV prevalence countries such as South Africa, the AIDS epidemic poses a serious threat to teachers. Teachers are singled out as being particularly vulnerable to HIV infection and as such they are considered to be a “high-risk occupational group” (Bennell, 2003). As education is a major engine of economic and social development, the absenteeism of teachers from school and ultimately their deaths affect the teaching resources available (United Nations Department of Economic and Social Affairs, 2004). In an article entitled “*AIDS will shatter education system in South Africa*”, Pela (2001) reported that up to 20% of teachers in KwaZulu-Natal, a province in South Africa, were HIV positive. Furthermore, as many as 16% of teachers in most provinces were tested positive for HIV.

Louw, Shisana, Peltzer and Zungu (2009) examined the impact of HIV/AIDS on South African educators by means of a cross-sectional survey. The results showed that HIV was highly prevalent among South African public educators (12.7%). Educators who were absent from school for longer periods (20 days or more), compared with those who were absent for less than four days, had a higher HIV prevalence (16.8% versus 11.95%) (Louw, Shisana, Peltzer & Zungu, 2009).

The above findings indicate that HIV/AIDS has a negative impact on the quality of education and that targeted prevention and treatment programmes are necessary to prevent new HIV infections (Louw, Shisana, Peltzer & Zungu, 2009). Stover and Bollinger (1999) state that HIV/AIDS negatively affects the health sector as more people seek healthcare. Furthermore, healthcare for AIDS is more expensive than for other conditions. Government expenditure on health services and social protection was approximately R268 billion in 2013-2014, with R26.9 billion spent on HIV/AIDS during the 2011 to 2014 period (South African Government, n.d.).

It is clear that due to the HIV/AIDS epidemic, expenditure on health services accounts for a large share of the country's annual national expenditure. Despite efforts to revitalise the healthcare system and ensure access to healthcare for all South Africans, the 2012 South African National HIV Prevalence, Incidence and Behaviour Survey reported that only 2.4 out of the total 6.4 million people infected with HIV were using or receiving antiretroviral therapy (Human Sciences Research Council, 2014).

A meta study conducted by Dixon, Macdonald and Roberts (2002) on the macroeconomic impact of HIV/AIDS in Africa confirmed a negative and substantial impact on GDP per capita as a result of HIV/AIDS (Dixon, Macdonald & Roberts, 2002). Although little agreement was found among economists about the impact of HIV on the economy, it was noted that the enduring impact of AIDS on a country's economic development was the loss of human capital, which represented a long-term investment that was rarely captured in economic models (Dixon, Macdonald & Roberts, 2002).

2.4.7 Unethical behaviour

The South African business world is increasingly characterised by unethical behaviour and commercial crimes. This is supported by the 2013 Corruption Perceptions Index (CPI), as perceptions of corruption in South Africa remain very strong (Corruption Watch, 2013). The index ranks 177 countries on a scale from 100 to 0 (very clean to highly corrupt).

In the CPI, South Africa obtained a score of 42, meaning that the country was perceived to be somewhat more corrupt than not (Corruption Watch, 2013). The CPI further revealed that South Africa dropped 34 places since 2001. The report also indicated that in South Africa, 40 to 49.9% of the respondents indicated that they had paid bribes in the previous year. Concerning public institutions entrusted to protect people, the police and judiciary were reported as the two most bribery-prone services (Transparency International, n.d.). These findings were mirrored by the South African Social Attitudes Survey (SASAS) conducted by the Human Sciences Research Council (Roberts, Kivilu & Davids, 2010).

According to the SASAS, levels of trust in the SAPS and local government were extremely low, as these institutions were held responsible for failing to reduce crime levels and improve service delivery (Roberts, Kivilu & Davids, 2010). The SASAS further revealed that the proportion of South Africans who believed that fighting corruption should be a national priority increased from 14% to 26% in the five-year period between 2006 and 2011 (Newham, 2014), which might show a positive move to less tolerance of corruption. Previous research conducted by King (1993) and Von Lieres and Wilkou (1993) indicated that people in management positions were responsible for 80% of the costs involved in white collar and commercial crimes.

Van Zyl (1997) investigated stress and ethical behaviour among South African managers and revealed that a stressful South African managerial climate gave rise to unethical behaviour. According to a survey conducted by Ipsos, a large research organisation in South Africa, the top five reasons for distrust in national government were (Government Communication and Information Systems, 2014):

- Corruption, nepotism, lack of transparency at local government authorities;
- Unkept promises;
- Unemployment and skills shortages;
- Housing issues; and
- Water supply issues.

Research supports the argument that corruption committed by Government officials and politicians is driving negative public perceptions of corruption in South Africa. This was supported by the 2013 Afrobarometer Survey, which indicated that South Africans perceive the office of the President as corrupt. According to the survey, negative perceptions of the South African presidency doubled from 13% in 2002 to 35% in 2011 and perceptions of trust and confidence in President Zuma declined from a high of 257 five years ago to 37 (Newham, 2014).

Newham (2014) states that confidence in the president has been eroded as a result of his dealings with convicted fraudster Shabir Shaik, the appointment of people with low ethical standards to key government positions and the Nkandla Project that cost the state as much as R273.8 million (McKune, 2013) and which, according to Newham (2014), was not morally justified. South Africans expect those in positions of leadership to provide comfort, hope and protect them against threats. In South Africa, however, those who occupy leadership positions have the effect of perpetuating negative sentiment (Munusamy, 2013). South Africans' trust and faith in public leaders are therefore diminished, resulting in distrust and distance between political organs and the population (Munusamy, 2013).

2.5 CONCLUSION

This chapter demonstrated that South Africans are subjected to a declining economy as a consequence of the 2007-2009 global economic recession, as well as other social issues, such as unemployment, poverty, crime, labour unrest, HIV/AIDS and unethical behaviour that affect their wellbeing. As further discussed in the next chapter, this compendium of negative news and poor perceptions of the country escalates into a psychological recession, which is characterised as a "doom and gloom" viewpoint where individuals adapt a pessimistic view of the present and become anxious about the quality of their future (Bardwick, 2008).

As organisations operate as an open system, these fears and worries develop into a widespread sense of vulnerability among South African employees. These negative perceptions and feelings brought about by a psychological recession signal a negative impact on organisations, resulting in organisations being unable to flourish and achieve their targets when their employees feel hopeless, pessimistic and fearful.

Chapter Three dissects the various elements of a psychological recession as derived from existing theory.

CHAPTER 3: A PSYCHOLOGICAL RECESSION

3.1	INTRODUCTION	49
3.2	THE NATURE OF A PSYCHOLOGICAL RECESSION.....	50
3.2.1	Defining a psychological recession.....	51
3.2.2	Negative consequences of a psychological recession.....	56
3.2.3	Components constituting a psychological recession.....	62
3.2.3.1	Work-related tension and psychological distress.....	63
3.2.3.2	Organisational change and psychological uncertainty.....	67
3.2.3.3	Work-family conflict.....	72
3.2.3.4	Job insecurity, job loss and unemployment.....	74
3.3	THE ROLE OF THE ORGANISATION IN BUFFERING A PSYCHOLOGICAL RECESSION.....	78
3.4	CONCLUSION.....	83

LIST OF TABLES

Table 3.1: Retrenchments based on Solidarity's analysis of media sources.....	70
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LIST OF FIGURES

Figure 3.1: South Africans feeling that the country is heading in the right direction	54
Figure 3.2: Confidence levels among South Africans of all races	55
Figure 3.3: Global engagement trends compared to global GDP.....	59
Figure 3.4: Africa-Middle East engagement trends compared to GDP	59
Figure 3.5: Overall engagement among the employed population in 142 countries worldwide.....	60
Figure 3.6: Employee engagement data for South Africa, Botswana and Nigeria...	61

CHAPTER 3: A PSYCHOLOGICAL RECESSION

3.1 INTRODUCTION

In the previous chapter an overview of the South African socio-economic landscape was provided, with specific reference to social issues which South Africans are exposed to and confronted with on an ongoing basis. Little research has explored the influence of external factors on worker health (Houdmont, Kerr & Addley, 2012). Employees' perceptions of the work environment are derived not only from their personal context and the organisational context, but also from the broader external socio-economic context (Houdmont, Kerr & Addley, 2012). As organisations operate in an open system, external events such as poor economic conditions and pressing social issues could create a deep sense of vulnerability among employees. Macroeconomic forces, including the regional, national and international economic situation affect workers directly, for example, employees' financial situation and emotional reactions to the economic outlook and indirectly such as pay freezes, layoffs or short time, introduced by organisations in reaction to the economic situation.

Closure, downsizing, outsourcing, offshoring, sub-contracting, delocalisation, layoffs, restructuring, mergers and acquisitions have become part of the global working environment. These cost-cutting strategies could have an overall negative impact on the health, wellbeing and functioning of the global labour force, organisations and society. As a result, people in general and employees specifically become afflicted with a shared condition known as a psychological recession, which is defined as a shared negative mindset in which people feel a deep, sustained sense of vulnerability (Bardwick, 2008). As discussed in the previous chapter, socio-economic challenges in South Africa which include high unemployment, a volatile labour relations landscape, high poverty levels, crime, HIV/AIDS and unethical leadership could contribute to a deep mood of pessimism (Bardwick, 2008).

Kuper (2009) concurs with Bardwick (2008), stating that in South Africa, across the board, there is insecurity regarding crime, unemployment, economic sustainability and political leadership. The effects of such a psychological recession, which is related to an economic depression, also sprout from the meaning that people attach to work.

Work is an essential component of people's lives, as it provides people with goals and meaning, identity and self-esteem, structure and content, a sense of belonging and material benefits (Antoniou & Cooper, 2013). This was also found by Noble, Ntshongwana and Surender (2008), who investigated South Africans' attitudes towards work and social security. The results of their study indicated that both employed and unemployed individuals placed a high value on paid work as it promoted dignity and a sense of community, while preventing social isolation. Events such as poorly managed recessions and restructuring pose a threat to all these benefits that work provide (Levi, 2012).

The aim of this chapter is to discuss the nature of a psychological recession, the extent to which a psychological recession is prevalent in South Africa, how it affects people and organisations and the role of the organisation in protecting its human resources against the negative effects of a psychological recession.

3.2 THE NATURE OF A PSYCHOLOGICAL RECESSION

In 2008, Professor Judith M. Bardwick, a management consultant and former professor at the University of Michigan and the University of California-San Diego, introduced the concept of a psychological recession (Bardwick, 2008). The pre-reading to this study revealed that current available research did not provide for sufficient understanding about the nature of a psychological recession and that empirical research in this area was lacking. This prompted the researcher to research this concept and its meaning in more depth.

The following sub-sections delineate the concept of a psychological recession by defining the concept, discussing the negative consequences of a psychological recession for the economy, organisation and the individual and outlining the various components that constitute a psychological recession.

3.2.1 Defining a psychological recession

As indicated, Bardwick (2008) is acknowledged for introducing the concept of a psychological recession. According to Bardwick (2008), a psychological recession is defined as people having a depressed view of the present and an even bleaker view of the future, as a result of a deep and sustained sense of vulnerability. A dissection of this definition reveals that a psychological recession comprises both a cognitive (e.g. view of the present and future) and emotional (e.g. sense of vulnerability) component.

According to Bardwick (2008), after the failure of several financial institutions in America the overall global economy experienced a significant slowdown and was still struggling to recover. During this period, many employees had been and are still exposed to activities such as downsizing, outsourcing and a cavalier organisational culture that does not value them as key assets. Due to this exposure, employees feel vulnerable and conclude that the organisation no longer values them (Bardwick, 2008).

The effects of the economic downturn are also felt in South Africa. In the face of major socio-economic issues, such as high unemployment, crime, poverty, labour unrest, HIV/AIDS and unethical behaviour, South Africans view their world as a dangerous and unpredictable place in which they have little or no control (Munusamy, 2013). These feelings contribute to a deep, sustained sense of vulnerability. The effects are also felt in the workplace.

Mcllvaine (2008) attempts to define a psychological recession. He states that a psychological recession manifests itself in the workplace as a feeling of economic and psychological vulnerability, where employees feel that they have significantly less control over what happens to them (Mcllvaine, 2008).

This definition implies that a psychological recession implies vulnerability and that vulnerability relates to feeling disempowered (less control), also due to economic circumstances. Goldsmith (2007) states that there is a widespread fear in the population, which is related to a pessimistic view that despite hard work and education, people do not have control over what happens to them. Russel (2011) also agrees that volatility in financial markets and discouraging news about socio-economic issues have a negative impact on a population's psychological wellbeing. Due to a prolonged, sustained fear that is characteristic of a psychological recession, people discount good news and more readily accept negative news stories (Bardwick, 2008).

Several studies have investigated the psychological impact of negative news and concluded that negative news contributes to a depressed mood state (Brosius, 1993; Johnston & Davey, 1997; Newhagen, 1998). This depressed mood state is aggravated when news is presented in a negatively slanted rather than in a balanced manner. Johnston and Davey (1997), for example, investigated the effect of the emotional content of television news programmes on mood state and the catastrophising of personal worries. As part of an experiment, three groups were shown 14-minute TV news bulletins that were edited to display positive-, neutral-, or negatively valenced material. Participants who watched the negatively valenced bulletin showed increases in both anxious and depressed mood. Furthermore, exposure to negative news led to enhanced catastrophising of personal worries.

News bulletins reflecting war, poverty, labour unrest and economic instability might therefore exacerbate a range of personal concerns not specifically relevant to the content of the programme itself (Johnston & Davey, 1997). The media plays a major role in contributing towards a psychological recession. News stories, such as the brutal rape and murder of Bredasdorp teenager Anene Booysens, the Gupta wedding fiasco, the conviction of former National Police Commissioner Jackie Selebi for corruption, widespread and violent xenophobic attacks across the nation, the Marikana massacre and the anxiety around the hospitalisation and death of Nelson Mandela, contributed towards a psychological recession among South Africans as according to

Munusamy (2013). This compendium of constant negative news has negatively impacted the nation's psyche.

According to Dr Saths Cooper, President of the International Union of Psychological Science, negative news in the media leads to a condition which he labels as an "ongoing psychic emergency", which contributes to stress and depression levels (Munusamy, 2013). People expect the country's leadership to provide comfort and hope and to protect them against threats. In South Africa, however, those in charge may have the effect of perpetuating negative sentiment because of poor or ineffective leadership. As a result, people no longer have faith and trust in the country's leadership to manage things on their behalf. This contributes towards distrust, distance between political organs, personalities and the population (Munusamy, 2013). Bardwick (2008) supports this by stating that these negative perceptions reinforce people's perceptions that there is no help to be found anywhere. As a result, people perceive the world as increasingly uncertain and undependable, which contributes to a deep sense of vulnerability (Bardwick, 2008).

This view is supported by the 2012 Department of Performance Monitoring and Evaluation's Development Indicators, an initiative that was launched by the South African government. Quantitative measures are used to monitor progress made in implementing policies, based on data sourced from South African research institutions, government databases and official statistics (Department of Performance Monitoring and Evaluation, 2013). Figure 3.1 shows the proportion of the South African adult population who in 2013 felt that the country "was going in the right direction". A steady decline in positive perceptions was evident from 1994 to 2014.

A psychographic survey conducted by FutureFact (2014) revealed that South Africans had interesting perceptions of the media. Though people complained that the media only reported bad news, the survey results revealed that South Africans had more confidence in the media than in the country's political parties and politicians.

The results revealed that the public relied mainly on the media to keep them informed and 83% of the respondents indicated that it was the duty of the media to expose corruption among politicians and business leaders.

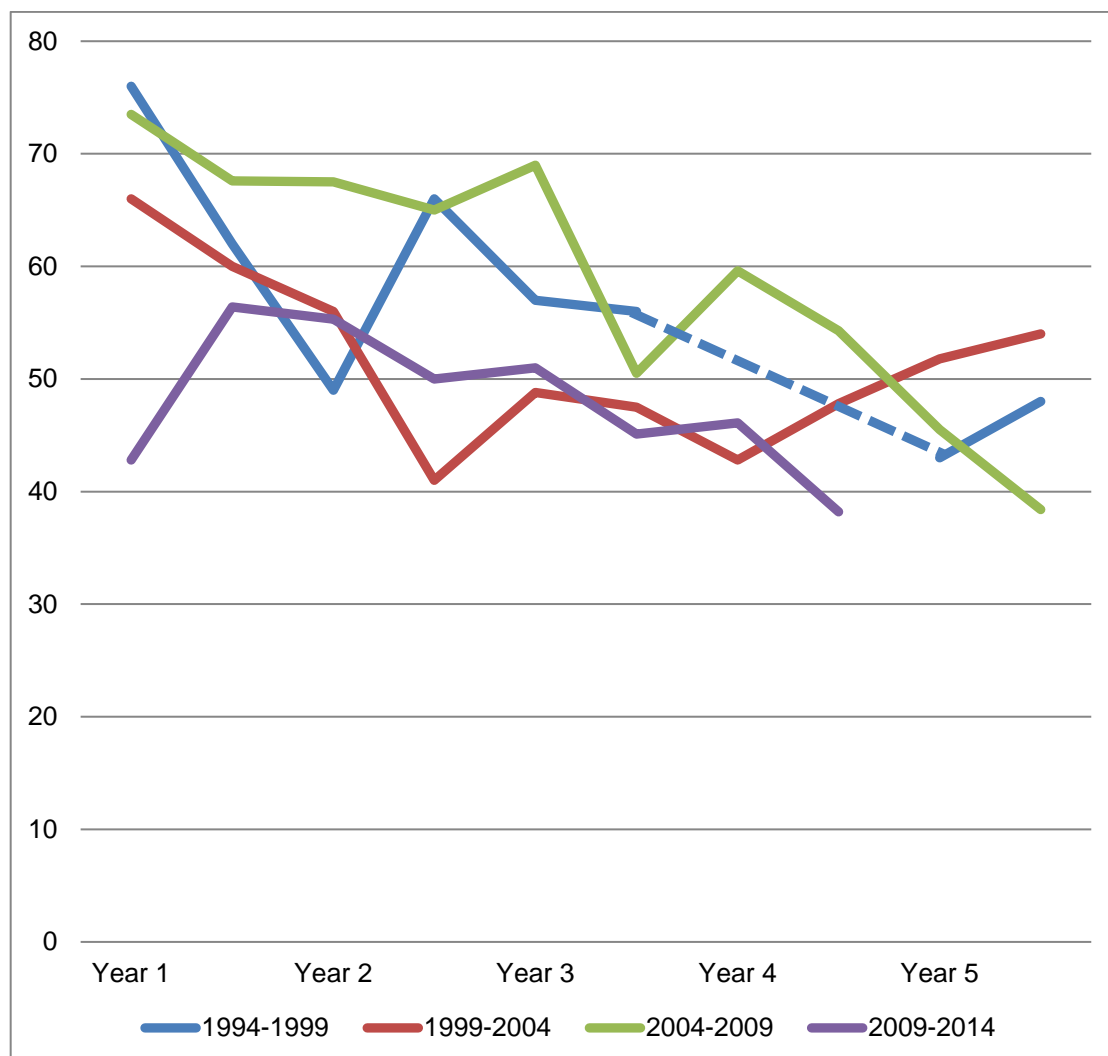


Figure 3.1: South Africans feeling that the country is heading in the right direction (Adapted from the Department of Performance Monitoring and Evaluation, 2013).

Feelings of being alone and vulnerable shape people's attitudes (Bardwick, 2008). Since the abolishment of Apartheid in 1994, for example, there have been recognised improvements in the living standards of people. The Development Indicators mentioned earlier revealed that 95% of households had access to potable water (up from 60% in 1994), 83.4% of households had toilets up to a basic standard (up from 51% in 1994) and the number of households with access to electricity increased to 76.5% (up from 52% in

1994) (Paton, 2013). Ngcaweni (2013) reported that for the first time since 1994, empirical evidence showed that the health status of South Africans was improving. South Africa, for example, has achieved one of the fastest rates of child mortality reduction in the world (Ngcaweni, 2013).

Still, given the above improvements, the widespread view that South Africa is currently doing poorly and that the future will be worse, is more a matter of perception than fact. The 2012 Development Indicators Report revealed that South Africans had an increasingly negative outlook of South Africa's future. Figure 3.2 shows that for all periods surveyed, over 50% of all races indicated that they felt confident about South Africa's future. Figure 3.2, however, also shows that since 2006, confidence levels among South Africans decreased dramatically. This sharp decline coincides with the onset of the global financial crisis (Department of Performance Monitoring and Evaluation, 2013).

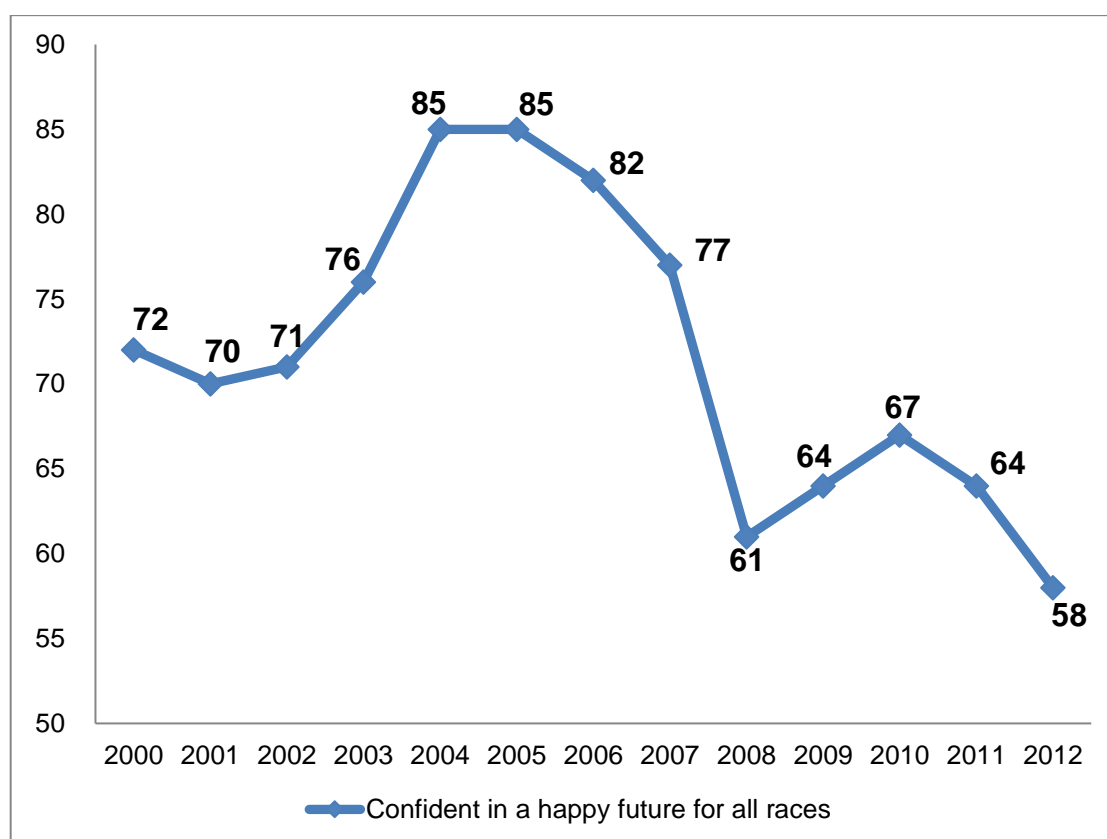


Figure 3.2: Confidence levels among South Africans of all races (Adapted from the Department of Performance Monitoring and Evaluation, 2013).

Regarding race relations, the report further revealed that on average, 39% of South Africans surveyed were of the opinion that race relations were improving. These findings signalled a need to implement sustainable nation-building initiatives aimed at improving social cohesion among South Africans (Department of Performance Monitoring and Evaluation, 2013).

Based on the preceding discussion, various authors unpacked the term “psychological recession”. For the purposes of this study, a psychological recession is defined as a negative cognitive and emotional condition experienced by communities, which is perpetuated by prolonged economic and social hardships, often amplified by the media. A psychological recession is characterised by depressed perceptions or views, anxiety, vulnerability, disempowerment and uncertainty. The negative consequences of a psychological recession are discussed in the following section.

3.2.2 Negative consequences of a psychological recession

A psychological recession poses negative consequences for the individual, the organisation and the economy. According to Bardwick (2008), a psychological recession is a real phenomenon with real consequences. A psychological recession is a global perception that is not only confined to the United States (Goldsmith, 2007). This is mainly due to the perception that personal security is disappearing or already gone. Bardwick (2008) supports this by stating that a psychological recession is more widespread than most people realise, as most people personally know someone who has been directly affected by retrenchments and other forms of organisational restructuring. Employees no longer have job security and feel anxious at work, as they see their organisations continue to downsize (Bardwick, 2008).

The widespread nature of a psychological recession could also have elements of mass hysteria, a phenomenon described in sociology and psychology as involving the transmitting of collective delusions of threats, whether real or imaginary, through a population in society as a result of fear and rumours (Bartholomew, 2001).

Mass hysteria may simply demonstrate the phenomenon of emotion contagion, in which the experience of an emotion is spread in the circles in which people move (Hatfield, Cacioppo & Rapson, 1993). When this kind of experience escalates into full-blown panic, whole communities are affected (Barlow & Durand, 2015).

On an individual level, many employees face heightened job risks and uncertainty about the future due to economic instability. An atmosphere of socio-economic instability is likely to offer a potential breeding ground for personal insecurity. In a study conducted by Lam, Fan and Moen (2014), individuals with high levels of job insecurity reported lower levels of psychological wellbeing.

Economic crises pose a high risk to the mental wellbeing of people who have been affected as well as their families. Uutela (2010), for example, reported that in European Union (EU) countries, rising unemployment was associated with significant increases in suicides. According to Chang, Stuckler, Yip and Gunnell (2013), nearly 5 000 suicides were reported in 2009 as a result of the global financial crisis. These deaths were associated with high unemployment levels (Chang, Stuckler, Yip & Gunnell, 2013). The South African socio-economic context has significant bearing on the prevalence of suicide in South Africa. With high unemployment levels, crime, poverty and rising cost of living, South Africa has the eighth highest suicide rate in the world (Van Der Merwe, 2015). According to the South African Federation for Mental Health, the country recorded approximately 8 000 suicides a year (News24, 2014a).

On an organisational level, cost-cutting strategies have a direct impact on people as the organisation ends its long-term commitment to employees through downsizing, layoffs and the use of temporary staff (Bardwick, 2008). These cost-cutting strategies have a negative impact on the psychological contracts between employers and employees.

The psychological contract, referred to as an emotional relationship between employees and their organisations, becomes strained in an uncertain economic climate. When these psychological contracts are perceived to be unfulfilled and violated, employees may experience reduced organisational commitment, reduced citizenship behaviour and engage in counterproductive work behaviour (Grobler, Bothma, Brewster, Carey, Holland & Wörnich, 2012).

Poisat and Theron (2014) investigated the impact of a psychological recession on psychological contracts when employees have been exposed to a large-scale retrenchment exercise. The findings of their study indicated that employees who have become afflicted with a psychological recession, perceived the psychological contract to be violated. As a result, employees were more likely to engage in various destructive work behaviours (Poisat & Theron, 2014).

Concerning engagement, Bardwick (2008) states that a psychological recession primarily has a negative impact on employee engagement levels. Employee engagement refers to the extent to which employees feel passionate about their jobs, committed to the organisation and put discretionary effort into their jobs (Poisat, 2006). When employees are perceived as a cost and treated as a liability, they do not work well and become unproductive, negative and actively disengaged (Bardwick, 2008). Actively disengaged employees are those individuals who feel the most negative about their jobs and spread negativity to co-workers (Crabtree, 2013).

AON Hewitt, a provider of human capital and management consulting services, has monitored the relationship between economic conditions and employee engagement since 2010. According to their 2014 Trends in Global Employee Engagement Report (refer to Figure 3.3), a slowing GDP tends to be associated with reduced engagement levels.

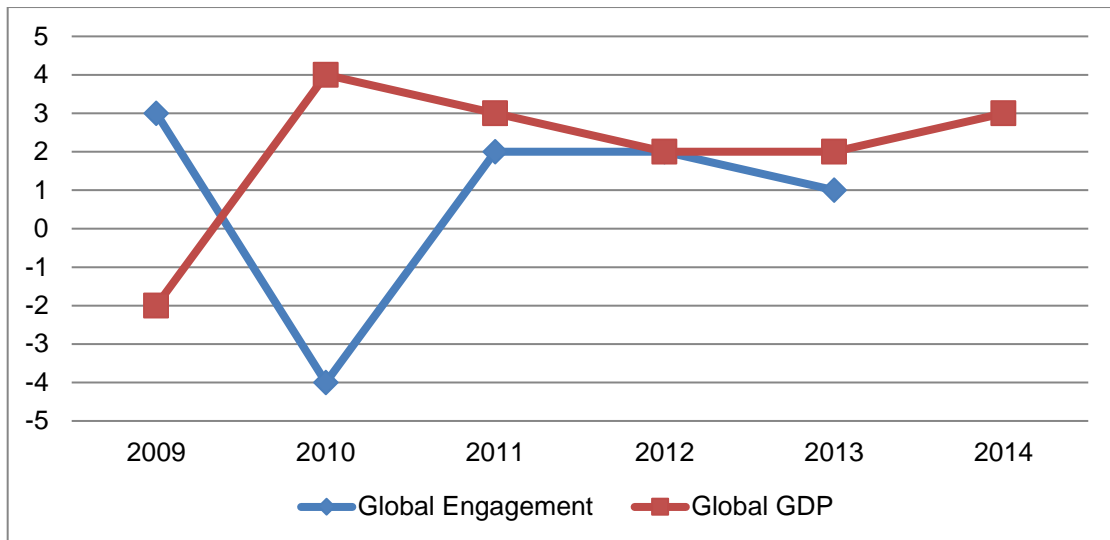


Figure 3.3: Global engagement trends compared to global GDP
(Adapted from AON Hewitt, 2014).

From Figure 3.3 it can be deduced that negative GDP growth recorded in 2009 was followed by a large decline in employee engagement levels in 2010. The same trend is noted in Figure 3.4, which indicates engagement trends compared to economic indicators for the Africa and Middle East region (AON Hewitt, 2014).

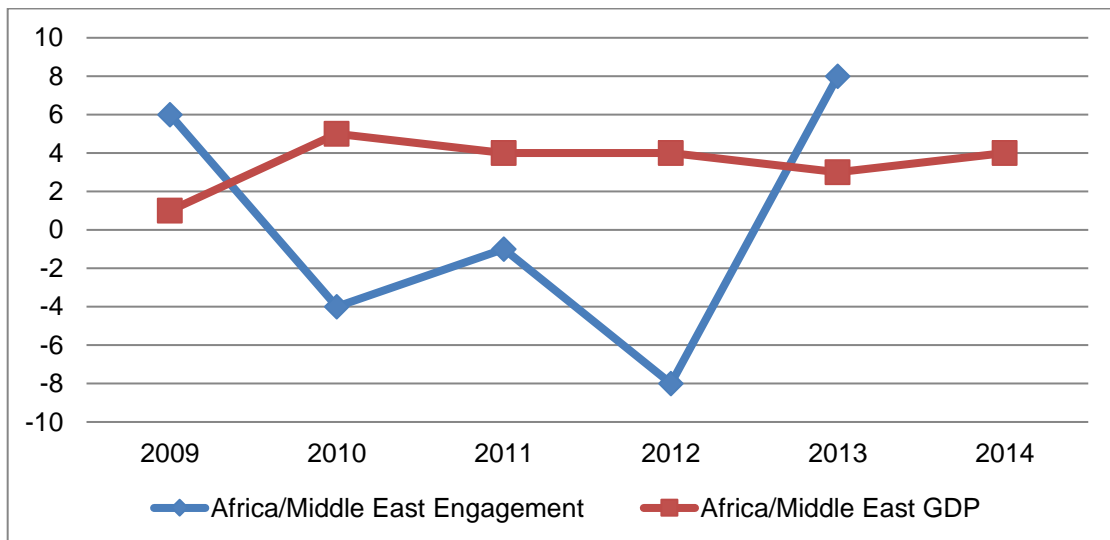


Figure 3.4: Africa-Middle East engagement trends compared to GDP
(Adapted from AON Hewitt, 2014)

The above graphs suggest that when people perceive the economic outlook as poor, they become more disengaged.

This disengagement could be the result of feelings of vulnerability and powerlessness, implying that the employee might feel that engagement will not change the situation.

According to the 2011-2012 Gallup study on the state of the global workplace, only one in eight employees (13%) is engaged in their jobs. This Gallup study included organisations in 142 countries. Figure 3.5, which is based on the results from the Gallup study, shows that employees who feel negative and potentially hostile towards their organisations continue to outnumber engaged employees at a rate of nearly two to one (Gallup, 2013).

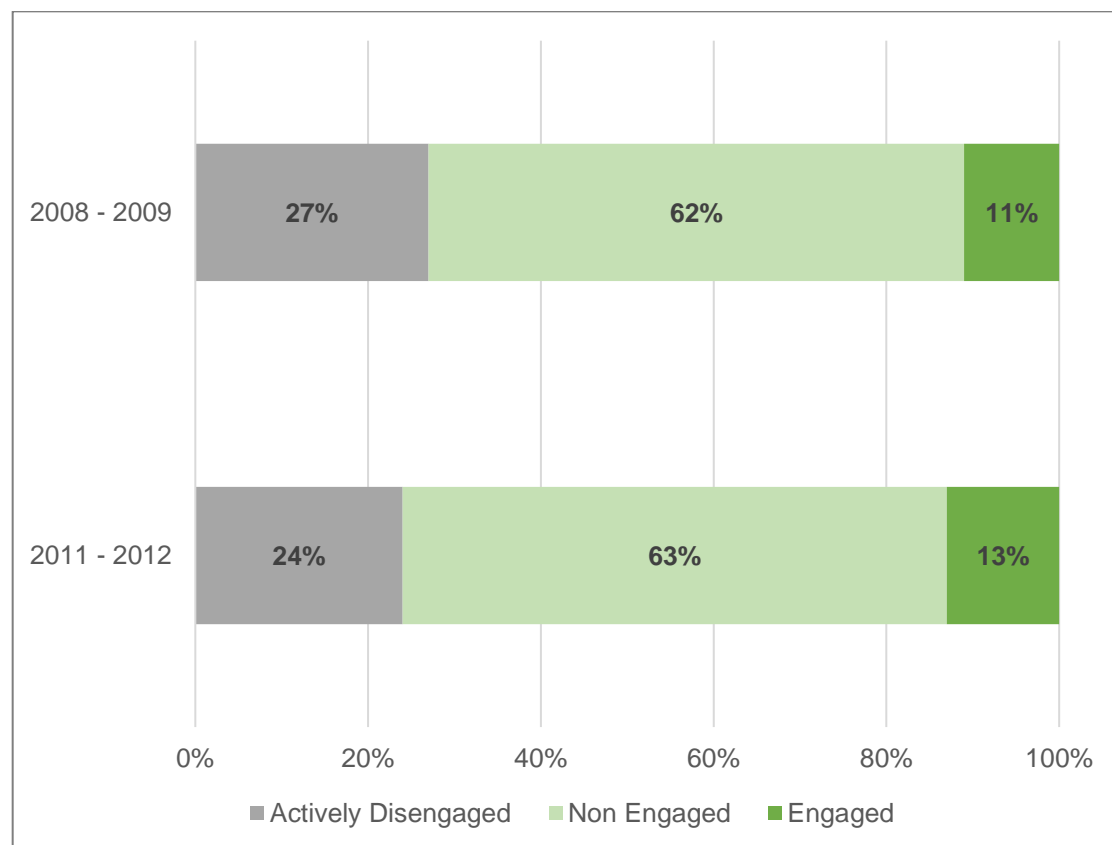


Figure 3.5: Overall engagement among the employed population in 142 countries worldwide (Adapted from Gallup, 2013).

Based on Figure 3.5, 63% of employees who participated in the 2011-2012 study indicated that they were not engaged, meaning that they were not motivated and less likely to engage in discretionary behaviour that contribute towards the achievement of organisational goals.

Figure 3.6 shows engagement scores for the sub-Saharan African region. According to Figure 3.6, South Africa has one of the highest percentages of actively disengaged employees in the world. It was indicated in the report that these percentages could be attributed to the mining industry that has been impacted by violent labour unrest (Gallup, 2013).

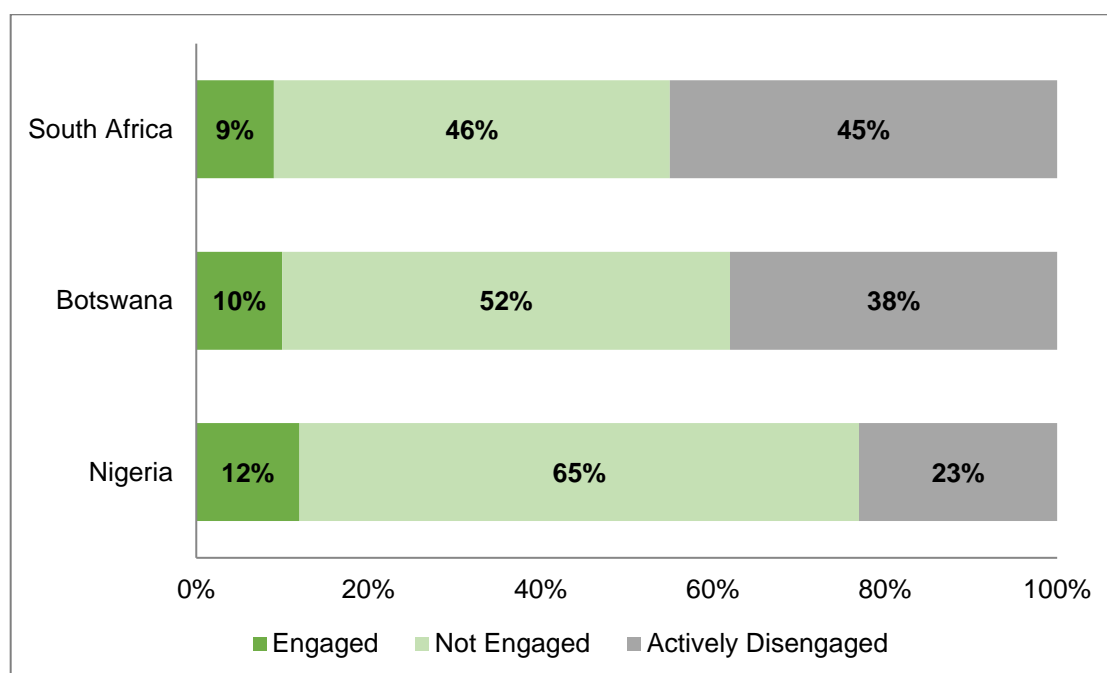


Figure 3.6: Employee engagement data for South Africa, Botswana and Nigeria (Adapted from Gallup, 2013).

Labour unrest, as discussed in the previous chapter, had a negative impact on production levels in the country's critical mining, metalworking, construction and transportation industries. Given the foregoing, the psychological crisis was mirrored in South Africa's employee engagement data, which indicated that only 9% of its workforce was engaged, while 46% of employees was actively disengaged (Gallup, 2013). Strike action in South Africa was projected to affect as many as 335 000 employees in various sectors (Gallup, 2013).

Crabtree (2013) states that employee engagement is an important factor when considering why global economic recovery remains slow. Engaged employees make a difference to the organisation's bottom line.

Gallup (2013) reported that work units who are engaged have significantly higher productivity, less turnover and absenteeism and fewer health and safety incidents than those work units that are not.

In the larger economic picture, a psychological recession negatively influences consumer spending and GDP. Rising inflation, labour unrest, nationwide protests by university students over tuition fees and severe droughts have contributed to a bleak outlook for consumer spending in South Africa (Holmes, 2014; Reuters, 2015). Toyana (2014) reported that weakened consumer confidence adds to mounting economic concerns, as 61% of South Africa's GDP is based on household spending (Holmes, 2014). In the third quarter of 2014, South Africa's consumer confidence slipped by five points due to risks of further labour disruptions in the country (Toyana, 2014). South Africa's consumer confidence slipped close to its lowest in 14 years in the fourth quarter of 2015 (Reuters, 2015).

In conclusion, a psychological recession has a negative impact on the broader economy as prolonged socio-economic hardships make people feel economically and psychologically vulnerable. As a result, people reduce their spending on consumer goods due to a growing belief that the country could deteriorate further. The various components constituting a psychological recession are discussed in the following section.

3.2.3 Components constituting a psychological recession

A psychological recession is defined by the effects and combined effects of various negative influences or experiences on the psychological constitution of people (Bardwick, 2008; Goldsmith, 2007; McIlvaine, 2008). The negative influences originate either from the external environment or from within the organisation, or both. The following are considered as the main components of these negative influences:

- Work-related tension and psychological distress
- Organisational change and psychological uncertainty
- Work-family conflict
- Job insecurity, job loss and unemployment

The fact that all these components are present concurrently due to poor socio-economic conditions implies that their interdependency and combined influence (i.e. “toxic mix”) have an impact on a large proportion of the population. The above components are unpacked in this section.

3.2.3.1 Work-related tension and psychological distress

The impact of the second worst economic recession has had a profound negative impact on the psychological wellbeing of people throughout the world. The World Health Organisation (2011) states that economic crises are detrimental to the subjective psychological wellbeing of the population and of the people affected and their families. Subjective psychological wellbeing, which refers to an individual’s perceptions and evaluations of his or her own life in terms of his or her general state of wellbeing, is classified into two broad factors (Bergh & Geldenhuys, 2013):

- **Emotional wellbeing** refers to aspects such as positive and negative affect, life satisfaction and happiness.
- **Positive psychological and social functioning** includes measures of positive interpersonal relations, purpose in life and personal growth. One aspect of social functioning is “coherence”, implying that the world is seen as predictable and operating according to rules. Regarding a psychological recession, people lose their sense of coherence as they feel they do not have control over the outcomes of their choices or behaviours, as life becomes unpredictable.

Perceived financial security is an important component of subjective psychological wellbeing, as economic crises and financial insecurity are often traumatic and stressful for individuals. In a study by Catalino (1991), for example, an increase was found in the reporting of psychological disorder symptoms, the use of mental health services and the incidences of seeking professional help for psychological disorders and distress during times of financial insecurity and economic adversity. Bridges (2003) states that an economic crisis presents a traumatic transition in a person’s life and that such a transition is characterised by three stages through which people must navigate.

The first phase of this transition is characterised by an ending, losing and letting go and is associated with emotional experiences of sadness, fear and resentment, as a result of loss and the ending of an important chapter in a person's life. During the second phase, individuals realign themselves psychologically and experience feelings of anxiety and overload because decisions need to be taken. The third phase is known as a new beginning that symbolises a sense of purpose encouraging individuals to accomplish their goals and move towards positive change (Bridges, 2003). It is therefore important to note that an economic crisis is a traumatic transition that is accompanied by the increase of psychological distress indicators, including general health, anxiety and sadness (Antoniou & Dalla, 2013).

Researchers from Gallup Organisation conducted a comprehensive global study in more than 150 countries to investigate how the demands of life have negatively affected employee wellbeing since the mid-twentieth century. According to Rath and Harter (2010), the researchers were able to identify five universal and important elements of employee wellbeing:

- **Career wellbeing** refers to how employees spend their time or enjoy what they do on a daily basis.
- **Social wellbeing** relates to maintaining healthy and strong relationships.
- **Financial wellbeing** refers to how effectively employees manage their economic life.
- **Physical wellbeing** is about maintaining good health and sufficient energy to get things done on a daily basis.
- **Community wellbeing** deals with the sense of engagement people have with the area where they live.

During an economic recession, employees are likely to suffer a reduction in these five elements due to job loss: job insecurity and exposure to downsizing strategies (career wellbeing), role overload and long working hours that interfere with work-life balance (social wellbeing), loss of assets (financial wellbeing), physical illnesses as a result of stress (physical wellbeing), and loss of property and involuntary relocation (community wellbeing) (Siu, 2013).

Several studies (Antoniou & Dalla, 2013; Lee, Guo, Tsang, Mak, Wu, Ng & Kwok, 2010; Sargent-Cox, Butterworth & Anstey, 2011) have highlighted the negative impact of economic pressures on the psychological health and wellbeing of employees. Sargent-Cox, Butterworth and Anstey (2011), in their study on psychological health, for example, revealed that the economic recession negatively impacts the psychological functioning of employees. Lee et al. (2010) provided evidence that the 2008 economic crisis aggravated depression among Hong Kong adults. Two cross-sectional surveys were conducted among Hong Kong adults in 2007 and 2009. The results indicated that a 12-month prevalence of a major depressive episode among respondents was significantly higher in 2009 than in 2007 (Lee et al., 2010). Their findings suggest that economic pressures significantly increase the risk of depression.

The financial crisis that began in 2008 has affected Greece more than any other European country (Nena, Steiropoulos, Papanas, Kougkas, Zarogomlidis & Constantinidis, 2014). Antoniou and Dalla (2013) investigated Greeks and immigrants' wellbeing during economic adversity. The results revealed that the financial crisis was associated with negative changes in life satisfaction of immigrants and native Greeks. In a similar study, Popham, Gray and Bamba (2012) investigated the prevalence of poor self-rated health between 1978 and 2004. Compared to 1978, there was evidence of higher levels of poor health in the subsequent years. The study further revealed a strong association between detachment from the labour market and the level of poor self-rated health (Popham, Gray & Bamba, 2012). Katikireddi, Nedzwiedz and Popham (2012) assessed short-term differences in population mental health before and after the 2008 global financial crisis. The results indicated that population mental health in men has deteriorated within two years of the onset of the 2008 global recession.

The global financial crisis of 2007 also contributed to higher absenteeism and stress levels among employees. Sickness absence is a serious and costly problem reflecting ill health and loss of functioning and work ability among employed populations.

Lalluka, Lahelma and Rahkonen (2012), for example, found that increasing and persistent economic difficulties predicted short- and long-term sickness absence among women and men. For this study, 3 859 municipal employees of the City of Helsinki, Finland, completed questionnaire surveys. Houdmont, Kerr and Addley (2012) investigated stress-related absence during a period of economic recession. The findings revealed that perceived work-related stress was significantly higher during a period of economic recession. The proportion of employees who had taken time off as a result of work-related stress were significantly greater during a period of economic recession than before it (Houdmont, Kerr & Addley, 2012).

The South African Press Association (2009) reported that absenteeism due to stress increased significantly in South African organisations in the 12 months from June 2008 to June 2009. Statistics generated from a sample of 150 000 employees in more than 70 South African organisations showed that stress-related absenteeism increased by 16.94% during this period. These findings suggest that when organisations commence with layoffs and other downsizing exercises, employees may feel more emotional and experience financial strain due to the risk of losing their jobs (South African Press Association, 2009). In a more recent South African study, Benjamin (2013) reported that since 2000, the number of sick days taken by South African employees has increased from 0.7 million to 3.96 million in 2013. It was estimated that, since 2000, the South African economy has lost R55.2 billion in cumulative terms due to sickness (Benjamin, 2013).

According to Bardwick (2008), symptoms of a psychological recession include anxiety, stress, depression and a sense of being powerless. These symptoms are associated with diminished mental health. Based on the above review of the literature, it is clear that economic downturns could result in diminished mental health and psychological wellbeing. Mental health is an important factor that contributes to the effective functioning of a country's economy.

Population mental health contributes to economic productivity and prosperity, as it enables people to realise their potential, cope with the normal stresses of life, work productively, and contribute to their communities (World Health Organisation, 2011).

Substantial research has revealed that individuals who are exposed to economic adversity have a significantly greater risk of mental health problems such as depression, suicide and alcoholism than their unaffected counterparts (World Health Organisation, 2011). Tromp, Dolley, Laganparsad and Goveneder (2014) reported that one third of all South Africans have mental illnesses. This figure translates into 17 million South Africans who are dealing with depression, substance abuse, anxiety or bipolar disorder and schizophrenia, according to the Mental Health Federation of South Africa (Tromp, Dolley, Laganparsad & Goveneder, 2014).

In conclusion, the above research demonstrates that the economic recession contributes to stresses in the workplace. As mental health is determined by socio-economic and environmental factors, an economic crisis affects the factors determining mental health and wellbeing (World Health Organisation, 2011). The negative effects of economic crises present an opportunity for organisations to strengthen their HR practices that would not only mitigate the impact of a psychological recession on deaths and injuries resulting from mental health disorders, but also reduce the economic burden presented by impaired mental health disorders. The above-mentioned conclusions are of particular interest to this research project and emphasise the role of the organisation in buffering the negative effects of a psychological recession, which is discussed in section 3.3.

3.2.3.2 Organisational change and psychological uncertainty

This component of a psychological recession refers to an individual's perceptions of job-related uncertainty during organisational change, such as changes to job roles, work-related tasks and promotion opportunities. This focus is different to job insecurity, which refers to employee perceptions regarding the continuity of the job itself (De Witte, 1999).

Organisational restructuring creates a stressful environment for employees as they are faced with uncertainties surrounding the security of their position in the organisation, changes in organisational culture, structures and work roles and responsibilities.

Based on the South African socio-economic context discussed in the previous chapter, it is clear that phenomena in restructuring and organisational change have become ever-present across South Africa, as a result of the economic recession. Since 2002, the European Restructuring Monitor (ERM) has been monitoring the negative impact of large-scale restructuring events on employment in the 27 EU member states, as well as in Norway.

The ERM differentiated between different types of organisational restructuring as follows (European Monitoring Centre on Change, 2011):

- **Internal restructuring:** Organisations that implement job-cutting plans, which are not related to another type of restructuring mentioned below.
- **Business expansion:** An organisation that extends its business activities and appoints new employees. This type of restructuring has been introduced to the ERM database to report on the positive impact of certain restructuring processes on employment.
- **Mergers and acquisitions:** Two organisations merge or one is taken over (acquired) by another and there is an internal restructuring programme that is aimed at rationalising the organisation by cutting personnel.
- **Outsourcing:** A business activity that is subcontracted to another organisation within the same country.
- **Relocation:** Activities stay within the same organisation, but the physical organisation is relocated to another location within the same country.
- **Offshoring or delocalisation:** An activity that is relocated or outsourced outside of the country's borders.
- **Bankruptcy or closure:** An industrial site is closed or liquidised due to economic reasons not directly connected to relocation or outsourcing.

The number of restructuring cases rises in times of recessions (Otto, Rigotti & Mohr, 2013). Economic recessions are described as a period in which a general decrease in a country's GDP occurs, with a simultaneous increase in bankruptcies and unemployment figures (Otto, Rigotti & Mohr, 2013). A recession is reflected in the 2013 ERM Annual Report, as between 2003 and 2013, 14 776 cases of large-scale restructuring cases in Member States have been reported. The number of restructuring cases related to job loss was almost double than that of announced job creation (9 503 compared to 5 363 cases). Total announced job loss associated with these cases was almost double than that of total announced job creation (4.75 million as compared to around 2.72 million) (European Foundation for the Improvement of Living and Working Conditions, 2013).

Solidarity, a South African trade union, reported that 45 000 jobs in 58 organisations have been affected by staff reduction processes in 2015 (BusinessTech, 2015b). The Solidarity Research Institute consulted the following sources to compile the 2015 Retrenchment Report (Solidarity Research Institute, 2015):

- The Solidarity ETM Labour Market Index
- Media reports on retrenchment processes in 2015
- A special electronic survey administered to Solidarity members
- Statistics from Solidarity's call centre and Legal Services Division

Table 3.1 on the following page provides a summary of staff reduction initiatives based on Solidarity's analysis of media reports on retrenchment processes in 2015. According to Table 3.1, a number of large South African companies has engaged in aggressive staff reduction initiatives. Table 3.1 further shows that from the media analysis, approximately 45 242 posts have been affected by staff reduction initiatives in 2015.

According to Table 3.1, the mining sector was most affected by retrenchments. The telecommunications industry came in second with Telkom being the biggest role player in the sector (Solidarity Research Institute, 2015).

Table 3.1: Retrenchments based on Solidarity's analysis of media sources (Adapted from Solidarity Research Institute, 2015).

SECTOR	NUMBER OF WORKPLACES	POSSIBLE NUMBER OF POSTS INVOLVED
Mining	24	19 807
Telecommunications	4	9 595
South African Post Office	1	5 065
Steel and Metal Industry	6	5 059
Chemical Industry	4	1 320
Aviation (SAA)	1	730
Electricity Supply	1	443
Other sectors	17	3 223
TOTAL	58	45 242

The impact of retrenchments in the steel and metal industry was similar to that of the South African Post Office with just over 5 000 jobs lost in each sector during this period. Solidarity's analysis has significant limitations, as not all staff reduction initiatives were covered in the media (Solidarity Research Institute, 2015). Furthermore, the proposed staff reduction processes of certain companies were not included in Solidarity's calculations, due to the fact that staff reduction numbers have not been released by the organisations at the time of publication (Solidarity Research Institute, 2015).

Although downsizing has a greater negative influence on employees who are laid off, the remaining employees, the survivors, are also affected as they are faced with fewer resources, increased workloads, and uncertainty regarding future employment (Siu, 2013).

A cluster of behavioural and health effects among remaining employees, described as "survivor syndrome", is characterised by demoralisation, risk aversion, reduced organisational commitment and poor health (Bose & Bohle, 2002).

Luthans and Sommer (1999) investigated the impact of organisational downsizing on workplace attitudes at a healthcare organisation during a three-year period. The findings revealed that employees' level of organisational commitment, job satisfaction and trust declined during the downsizing intervention. In addition, levels of organisational commitment and job satisfaction were significantly different between departments that were affected versus those that were not affected by the restructuring exercise (Luthans & Sommer, 1999).

After downsizing, the remaining employees often have to carry the same workload as the larger workforce had prior to the job cuts. Parker, Chmiel and Wall (1997) found that there was an increase in survivors' work demands after a downsizing exercise. Furthermore, an increase in survivors' work demands was associated with poor wellbeing (Parker, Chmiel & Wall, 1997). In these uncertain circumstances, rumours about future downsizing may also cause psychological distress for survivors. Reissman, Orris, Lacey and Hartman (1999) found that six months of rumours regarding a planned downsizing exercise reduced employees' individual productivity and teamwork. The findings further revealed that major downsizing was associated with changes in job characteristics, negative health behaviours such as smoking, substance abuse and alcohol consumption and diminished social support (Reissman, Orris, Lacey & Hartman, 1999).

Job uncertainty is an important aspect of employees' responses to restructuring, as uncertainty has been shown to have a lingering effect on survivors' emotional health (Hellgren, Sverke & Isaksson, 1999; Paulsen, Callan, Grice, Rooney, Gallois, Jones, Jimmieson & Bordia, 2005). In a study conducted by Paulsen et al. (2005), the authors developed and tested a model of job uncertainty for survivors and victims of downsizing. Data were collected from three samples of employees in a public hospital, each representing three phases of the downsizing process: immediately before the announcement of downsizing of staff, during the implementation of the downsizing and towards the end of the official change programme.

The findings revealed that during the implementation phase, both survivors and victims, reported similar levels of job uncertainty.

In conclusion, it is clear that organisational restructuring poses negative consequences for employees. Therefore, to effectively execute downsizing strategies, organisations have to gain a better understanding of the impact of restructuring on employees' health, behaviour and attitudes (Bose & Bohle, 2002). In this way, effective restructuring is not a short-term solution but rather a long-term investment in the organisation's human resources.

3.2.3.3 Work-family conflict

As a result of the economic recession and a growing sense of work pressure, employees struggle to achieve equilibrium between work and life. Equilibrium is defined as a settling point where work and the rest of life's activities reside side by side (Beardwell & Claydon, 2007). Researchers often find it difficult to define work-life balance (Beardwell & Claydon, 2007; Gregory, Milner & Windebank, 2013; Lewis, Gambles & Rapoport, 2007). Clark (2000) defines work-life balance as achieving satisfaction and good performance at work and at home with a minimum of role conflict. Heavy workloads contribute to strain and make it increasingly difficult for employees to meet both work and personal responsibilities. Nordenmark (2004) found that multiple demands increase the risk of suffering from fatigue for both women and men.

Economic hardship results in a chronic form of household stress and threatens security and stability. Bardwick (2008) supports this view by stating that a psychological recession creates confusion and tension at work and at home. In many families, traditional gender roles have progressed to a unisex model where responsibilities between couples are shared, while pressure at work has increased for both men and women as organisations aim to increase productivity and save costs (Bardwick, 2008). This finding is supported by a research report published by the Chartered Institute for Personnel and Development (CIPD) (2013).

According to this report, 61% of those surveyed reported work-life balance at the end of 2012, while this percentage reduced to 56% in the first quarter of 2013 (CIPD, 2013).

Recent findings published by the European Social Survey (2013) revealed that the global financial crisis significantly contributed to work-family conflict as a result of greater work intensity, job insecurity and financial strain. Evidence from the European Social Survey (2013) showed a significant increase in work-family conflict between 2004 and 2010. The report indicated that there was a general tendency for work-family conflict to be higher among married and cohabitating couples during times of unemployment (European Social Survey, 2013).

Several research studies have identified links between economic stressors and work-family outcomes such as marital problems, work-family conflict and dissatisfaction with work-family balance. Conger, Rueter and Elder Jr. (1999), for example, investigated the impact of economic pressure on marital relations among 400 married couples who participated in a three-year prospective study. The results of the study revealed that economic pressure increased the risk for emotional distress, which in turn increased the risk of marital conflict and subsequent marital distress (Conger, Rueter & Elder Jr, 1999).

Dew, Britt and Huston (2012) examined the extent to which financial wellbeing, financial disagreements, and perceptions of financial inequity were associated with the likelihood of divorce. The findings revealed that financial disagreements were the strongest predictor of divorce (Dew, Britt & Huston, 2012). These researchers used longitudinal data from the National Survey of Families and Households and both wife- and husband-reported data (N = 4 574 couples).

Zvonkovic, Lee, Brooks-Hurst and Lee (2014) investigated perceptions of economic strain and family adjustments among professionals in a family context.

For this study, 130 participants from 71 families responded to questions about recent changes at work and financial wellbeing, as well as daily family adaptations associated with the economic recession. The majority of the sample indicated financial decline, an increase in demands at work and an increase in rushed feelings at home. The biggest financial adjustment these participants had to make was in regard to leisure activities (Zvonkovic, Lee, Brooks-Hurst & Lee, 2014).

Similarly, Schieman and Young (2011) investigated the relationship between work-family conflict and perceptions of economic hardship. They assessed individuals' ability to pay their bills, afford medical care and acquire basic necessities. Based on the findings, the authors concluded that economic hardship was the strongest predictor of work-family conflict.

In conclusion, it is clear that economically stressed employees may be more vulnerable to work-family conflict. This is because they have less access to and are less able to utilise specific practices and programmes designed to alleviate work-family conflict. Organisations could therefore assist their employees in achieving work-life balance as a strategy to retain the most capable and engaged employees.

3.2.3.4 Job insecurity, job loss and unemployment

As indicated, Bardwick (2008) describes a psychological recession as a feeling of chronic vulnerability due to a loss of economic security. As a result of large-scale workforce reductions, outsourcing and job insecurity, the once valued psychological contract that provided job security has been replaced by a reality that employees remain employed as long as they can make a contribution to the organisation (Bosman, Rothman & Buitendach, 2005; Sverke, Hellgren & Näswall, 2002). Due to these changes in the employment relationship, employees have lost their sense of protection.

Job insecurity refers to employees' negative reactions to the changes concerning their employment, as well as the extent to which they fear that they may lose their jobs (Bosman, Rothman & Buitendach, 2005).

The subjective experience of job insecurity has a strong psychological impact on individuals, as the perceived threat of unemployment contributes to feelings of frustration and the potential loss of financial and social resources. Job insecurity as a work-related stressor has been linked to outcomes such as decreased job satisfaction, organisational commitment and job performance, as well as increased ill-health and organisational turnover (Pienaar, De Witte, Hellgren & Sverke, 2013).

Bardwick (2008) supports this by stating that in general, job insecurity negatively affects individuals' view of reality, as most people have seen, heard about, or read about people who have been laid off as a result of organisational downsizing. As a result, employees become anxious and fear that they may be next. This finding is supported by a survey conducted by a Canadian newspaper, The Toronto Star, which revealed that 34% of Canadians indicated that they were concerned that an immediate family member would be retrenched during the year. Furthermore, the majority of the sample felt like there were not sufficient jobs available in the job market (Acharya-Tom Yew, 2014). Because of this depressed mindset, people start to view the world as a risky place in which they have little or no control (Bardwick, 2008).

Socio-economic statistics cited in the previous chapters reflected widespread unemployment due to the 2008 global financial crisis. At a socio-economic level, mass layoffs, unemployment and underemployment statistics, economic forecasts and occupational outlooks influence employees' perceptions of job insecurity. Meltzer, Bebbington, Brugha, Jenkins, McManus and Stansfeld (2010) investigated socio-economic circumstances as a moderating factor in the relationship between job insecurity and depression. The results indicated that employees experience additional distress and feelings of depression when they are exposed to poor socio-economic circumstances.

In a similar study, Modreck and Cullen (2013) investigated job insecurity during economic recessions by examining self-reported work stress from 2009 to 2011 at an organisation that experienced severe downsizing in 2009.

The results indicated that employees working at plants where large numbers of employees were laid off, experienced more work stress than their counterparts at plants without high levels of layoffs. One can therefore expect that, as the broader socio-economic context worsens, fears regarding job security would increase (Jian, Probst & Sinclair, 2013). Unemployment, as discussed in the previous chapters, is a worldwide problem and will remain a challenge in the future (Griep, Rothman, Vleugels & De Witte, 2012). Adcorp (2014a) reported that South Africa experienced six consecutive months of employment declines in 2014 and therefore faced a job recession. The Adcorp Employment Index for August 2012, for example, fell at an annualised rate of 0.23%, following sharp declines of 3.1% in May 2012, 2% in June 2012 and stalled employment numbers in July 2012 (Anderson, 2012). Individuals who lose their jobs suffer the most during an economic downturn, as these individuals are forced to make significant life changes (Shupe & Buchholz, 2013). Jahoda's (1982) theory on unemployment postulates that unemployment and job loss deprive individuals of the following five latent functions of work:

- Structure in life;
- Regularly shared experiences outside the family;
- The experience of creativity, mastery and a sense of purpose;
- Personal status and identity and
- Activity and stimulation.

It is not surprising, therefore, that individuals who have been laid off experience emotional reactions that are similar to loss, grieving, migration and divorce (Furnham, 2013). Employees who have lost their jobs experience symptoms related to post-traumatic stress disorder and could fall in a cycle of decline. Several research studies support the idea that unemployment is detrimental to mental health. Researchers from Taiwan, Hong Kong and Britain investigated suicide reports from around the world, along with information on GDP and unemployment figures provided by the International Monetary Fund, World Health Organisation and the Centre for Disease Control. The results attributed approximately 5000 suicides to the 2009 global financial crisis (Chang, Stuckler, Yip & Gunnell, 2013).

The study further revealed that after the 2008 economic crisis, rates of suicide increased particularly in men and in countries with higher levels of job loss (Chang, Stuckler, Yip & Gunnell, 2013). A study conducted by Barr, Taylor-Robinson, Scott-Samuel, McKee and Stuckler (2012) yielded similar results. These researchers investigated suicides associated with the 2008 economic recession in England by means of a time trend analysis. The results revealed that English regions with higher unemployment rates had the largest increase in suicides, particularly among men (Barr, Taylor-Robinson, Scott-Samuel, McKee & Stuckler, 2012). Previous studies have indicated that men find it more difficult to talk about their feelings and are more likely to engage in risky behaviour when they are feeling depressed (Hodgekiss, 2014).

From a South African context, Nair (2014) reported that there were more suicides annually in South Africa than in the US and UK. Given the South African socio-economic landscape discussed in the previous chapter, Schlebusch (2005) have found that socio-economic factors such as financial problems, rapid urbanisation, increased competitiveness in education and employment and rising expectations in the young contribute to suicidal behaviour. In another study, Griep, Rothman, Vleugels and De Witte (2012), compared South African and Belgian individuals in terms of the subjective experience of unemployment, commitment towards employment and job search behaviour.

The results of the study suggest that, when compared to Belgian unemployed, South African unemployed individuals generally experienced their unemployment in a more negative way, displayed more job search behaviour and were more committed towards finding employment. Unemployed South Africans might get caught in a downward spiral of poverty, decreased wellbeing and long-term unemployment, due to the fact that they are confronted with more significant socio-economic demands (Griep, Rothman, Vleugels & De Witte, 2012; Schlebusch, 2005). Shupe and Buchholz (2013) assert that research related to unemployment normally focuses on the impact of unemployment on mental health.

This narrow focus has led to an incomplete understanding of the impact of unemployment in other domains. Apart from the mental and physical health consequences associated with job loss and unemployment, Shupe and Buchholz (2013) state that unemployment and job loss also have consequences for an employee's career and social relationships.

Job loss and unemployment have a negative impact on work-related attitudes such as organisational commitment and job satisfaction. As job loss is associated with feelings of frustration, anger and other negative emotions, these emotions are likely to spill over onto friends and family. Hence, key social relationships suffer as a result of the stress associated with job loss (Shupe & Buchholz, 2013). Clark, Georgellis and Sanfrey (2001) showed that past unemployment has a negative impact on an individual's current life satisfaction even after the individual has become reemployed. This phenomenon is also known as the "scarring" effect of unemployment, as past unemployment damages a person's psyche, independently of the person's current employment status (Knabe & Rätzl, 2011).

In conclusion, the above literature on unemployment and job loss has been instrumental in demonstrating the harmful psychological consequences of being unemployed. The economic recession means that more jobs will be shed by organisations and more organisations will be forced to implement various cost-cutting strategies to survive. In light of this, organisations have the challenge of re-engaging and protecting or buffering employees in an environment characterised by a psychological recession if they want to optimise the work contributions of their employees.

3.3 THE ROLE OF THE ORGANISATION IN BUFFERING A PSYCHOLOGICAL RECESSION

As mentioned earlier, the economic recession prompted many organisations to implement restructuring initiatives. These initiatives have left many employees feeling disillusioned, dissatisfied and disengaged.

As a psychological recession counters positive employee attitudes such as engagement and organisational commitment (Bardwick, 2008; Furness, 2008; Poisat & Theron, 2014), HR departments should deploy various positive practices that will empower, re-engage and retain employees as the economy improves. An organisation's HR department plays a more crucial role during difficult times than during periods of prosperity and growth (Bidya, 2009).

Wickramasinghe and Perera (2012) state that organisations should adopt HRM practices that will help employees withstand the uncertainties associated with the economic recession. HRM practices therefore play a crucial role in managing employees' beliefs and attitudes through a recession (Bidya, 2009). Wickramasinghe and Perera (2012) investigated various HRM practices adopted by organisations during the economic recession and their impact on employees' happiness at work. The results indicated that information-sharing practices, performance management and a reduction in financial rewards and benefits significantly influenced employees' happiness at work, irrespective of the size of the firm (Wickramasinghe & Perera, 2012).

Concerning information-sharing practices, Wickramasinghe and Perera (2012) state that employees may feel less anxious when organisations share business information, including information about challenges, successes and the future direction of the organisation. Ineffective communication from management fuel inaccurate rumours and as a result, negatively affects worker morale. The Watson Wyatt 2004 WorkUSA study (2004) revealed that open communication with employees during challenging times resulted in increased shareholder returns and share price (29.5% increase), as well as reduced turnover rates (Watson Wyatt Worldwide, 2004).

Maintaining communication with employees foster and sustain positive employer-employee relationships (Gandolfi, 2008). Furthermore, organisations should explicitly acknowledge the uncertainties and also provide current information about the actions being taken to secure employment.

Regarding workforce reductions, organisations should create a plan for employee terminations and layoffs and establish clear communication lines with both departing and remaining employees. These practices can make turbulent times much easier to weather, as truthful, consistent communication ease the stress for departing employees and their supervisors, while building trust with the remaining employees (Lieber, 2009a).

Although most European countries were affected by the financial, fiscal and economic crisis, the Irish recession was considered the most acute recession as experienced by developed economies (Roche, Teague, Coughlan & Fahy, 2011). The Survey of Employers (2011) research study was conducted to investigate the HR response of 444 Irish organisations to the economic recession. According to the 2011 Survey of Employers report, communication and information disclosure was listed and clearly ranked as the most effective HRM practice in assisting Irish organisations to manage the effects of the recession on employees (Roche, Teague, Coughlan & Fahy, 2011).

Organisations' work systems are challenged in difficult economic conditions when cost structure and scale often have to be altered in response to a recession. Layoffs and restructuring may, for example, lower costs but rarely reduce employees' workload. The remaining employees are the ones who have to perform more duties and work longer hours with fewer resources (Wickramasinghe & Perera, 2012). According to Mohrman and Worley (2009), organisational restructuring should therefore be aimed at ensuring that the right talent is applied to the right tasks.

In this regard, the literature also identifies the importance of an effective performance management system (Bidya, 2009; Stern, 2009; Wickramasinghe & Perera, 2012). Organisations should involve employees in the performance planning process as it increases their morale and confidence, while providing them with a clear picture of what the organisation expects from them and what they need to accomplish during the recession (Bidya, 2009).

An effective performance management system will ensure that employees not only fulfil their responsibilities, but also perform them to the best of their abilities and up to the organisation's expectations, especially during challenging economic conditions (Bidya, 2009; Wickramasinghe & Perera, 2012).

Training is an important aspect in performance management. According to Lieber (2009b), organisations often remove training from their HR budgets during an economic recession, as senior management perceives it as discretionary and nonessential. This was evident in the 2011 Survey of Employers, as more than half of all the organisations in the survey significantly reduced their training and development budgets as a result of the Irish economic recession (Roche, Teague, Coughlan & Fahy, 2011). Suspending development activities signal to employees that they are not an important resource and increases cynicism (Mohrman & Worley, 2009).

An organisation's investment in talent symbolises its commitment to the future and helps build leadership capability, as leaders are facing new kinds of challenges during an economic downturn (Mohrman & Worley, 2009). Furthermore, continuous training and development will assist organisations in upgrading the skills and abilities of employees in a complex and uncertain environment, due to the global financial crisis (Rao, 2009).

Mark Hulbert, a financial analyst, compared levels of organisational spending on training and development and investigated how these organisations performed financially (Bardwick, 2008). The results indicated that organisations that spent most on training and development initiatives earned 16.2% more on average (Bardwick, 2008). Based on the preceding discussion, it is clear that organisations should not perceive their training budgets as the primary source for cutting costs. Training provision during an economic recession will provide employees with the necessary confidence to perform their tasks effectively, while reducing their fears related to the consequences of recession on them and their organisations (Rao, 2009).

Many organisations communicate early in an economic recession with employees about the likelihood of wage cuts and reduced raises and bonuses. According to Giancola (2009) and Lieber (2009a), wage cuts negatively affect employee morale, productivity and turnover. Organisations should therefore not completely stop rewarding employees during a recession (Mohrman & Worley, 2009). According to Lieber (2009a), they should focus on non-monetary incentives during an economic downturn. It is easy for supervisors, for example, to become more task-oriented and less focused on employees during difficult times. Employees, however, require the most attention and reassurance from their supervisors during difficult times. Providing top performers with recognition will make them feel valued, even in the absence of monetary rewards (Lieber, 2009a).

Non-monetary rewards such as training and development, providing employees with challenging tasks and projects, celebrating successes and public acknowledgement of special contributions, can increase employee engagement during difficult times (Mohrman & Worley, 2009).

Creative benefits such as flexible work arrangements will allow employees and organisations to save money (Lieber, 2009a). Bardwick (2008) supports this by stating that organisations should demonstrate their commitment to employees by implementing family-friendly policies and practices. Family-friendly policies and practices, such as flexible working hours and compressed workweeks, have become increasingly important in the twenty-first century, as today's working parents are time-deprived and multi-stressed (Bardwick, 2008).

Lee and Hong (2011), for example, investigated the impact of four types of family-friendly policies (i.e. childcare subsidies, paid leave for family care, telework and flexible work schedules) on organisational turnover rates and effectiveness. The results revealed that childcare subsidies and flexible work schedules reflected a positive and significant influence on organisational effectiveness. Furthermore, childcare subsidies showed a positive, significant influence on reducing turnover (Lee & Hong, 2011).

As a psychological recession has a negative influence on work-life balance, organisations should provide employees with supportive environments where they have flexibility and control over their work (Bardwick, 2008).

Concerning monetary rewards, Bardwick (2008) states that employee stock ownership plans contribute to employee engagement, as employees start to realise that their dedication is crucial for the organisation's financial survival and success. Mohrman and Worley (2009) state that organisations should use reward monies sensibly to reinforce clearly defined performance standards that are critical to both short-term survival and longer-term competitiveness.

In summary, organisations should adopt various HRM practices to weather the negative influence of a psychological recession. Organisations that honour superior management practices will not only withstand the uncertainties associated with an economic recession, but will also increase retention, improve overall performance and create a sense of engagement with employees (Bardwick, 2008).

3.4 CONCLUSION

The main intention of this chapter was to delineate the nature of a psychological recession. As a result of the global financial crisis, many organisations commenced with large-scale restructuring activities. These overwhelming organisational changes contributed to a psychological recession, as employees become economically and emotionally vulnerable. Based on a thorough review of the literature, it is clear that a psychological recession is not only negatively affecting the mental state of South Africans, but also the bottom line success of organisations and the broader economy.

On an individual level, economic crises negatively affect the mental wellbeing of employees. Several research studies have indicated relationships between rising unemployment and suicide (Chang, Stuckler, Yip & Gunnell, 2013; Uutela, 2010). On an organisational level, a psychological recession has a negative influence on employee engagement.

A psychological recession is mirrored in South Africa's employee engagement data, as South Africa has one of the highest percentages of actively disengaged employees in the world (Gallup, 2013). In the larger economic picture, mounting socio-economic concerns have contributed to a negative outlook for consumer spending in South Africa, as the country's consumer confidence has slipped by five points in the third quarter of 2014 (Toyana, 2014). Furthermore, negative GDP growth tends to be associated with reduced employee engagement levels (AON Hewitt, 2014).

Organisations are unable to flourish and fulfil their possibilities when their workforce is chronically anxious, as fear destroys energy, trust, teamwork, innovation, and courage (Bardwick, 2008). Organisations have the responsibility to weather the negative impact of a psychological recession on its workforce. The literature also emphasised the importance of deploying various HRM practices that will effectively manage employees' attitudes and behaviour during an economic recession. The next chapter will investigate the nature of PsyCap, the relationship between HRM practices and PsyCap, as well as the importance of HRM practices in developing PsyCap during a psychological recession.

CHAPTER 4: PSYCHOLOGICAL CAPITAL

4.1	INTRODUCTION	85
4.2	THE BACKGROUND AND FOUNDATION OF PSYCAP	86
4.3	COMPONENTS OF PSYCAP.....	91
4.3.1	Hope	92
4.3.2	Self-efficacy	95
4.3.3	Resilience	98
4.3.4	Optimism.....	101
4.4	POSITIVE OUTCOMES ASSOCIATED WITH PSYCAP	103
4.4.1	Employee attitudes and behaviour.....	104
4.4.2	Employee wellbeing	107
4.4.3	Individual and organisational performance	108
4.5	THE INFLUENCE OF A PSYCHOLOGICAL RECESSION ON PSYCAP	109
4.6	THE ROLE OF HRM PRACTICES IN DEVELOPING PSYCAP	112
4.7	CONCLUSION.....	119

LIST OF FIGURES

Figure 4.1: The state-trait continuum	88
Figure 4.2: The influence of PsyCap on employee attitudes and behaviours	105
Figure 4.3: The Psychological Capital Intervention (PCI).....	116

CHAPTER 4: PSYCHOLOGICAL CAPITAL

4.1 INTRODUCTION

As noted in the previous chapters, the global financial crisis, which started in 2007 resulted in higher levels of unemployment, job insecurity, failing financial institutions and a collapse in the housing and financial markets. The global financial crisis and the accompanying psychological recession also resulted in many organisations and employees losing hope, confidence and optimism (Goldsmith, 2007). The human toll of this crisis was evidenced by heightened concerns for decreased psychological and mental wellbeing, feelings of vulnerability, helplessness and alienation (Luthans, Youssef-Morgan & Avolio, 2015). It was therefore imperative for organisations to consider with empathy their employees' experiences since the onset of the global financial crisis. Organisations had to assist their employees in bouncing back to pre-crisis levels of psychological wellbeing (Conkright, 2011). According to Conkright (2011), organisations should adopt the following practices to help employees "bounce back":

- **Empathise** by gaining an understanding of the stress employees face during the economic recession.
- **Provide employees with hope** by sharing with employees how they fit into the organisation's future.
- **Re-establish trust** by collaborating with and empowering employees to have some control over their work.
- **Sustain employees' wellbeing** by focusing on initiatives that can help employees find meaning in their work, balance aspects of their lives and minimise their stress.

Considering the essence of these suggested practices, it is evident that, to build resilience in employees, employers need to build relationships and sculpt jobs that will empower and give employees meaning, not only for the present, but also the future. Employers thus have to build the PsyCap of their employees.

Organisations whose employees have developed strong PsyCap are more productive and have constructive work-related attitudes, as opposed to organisations whose employees are in a “state of gloom and doom” (University of Nebraska-Lincoln, 2009). PsyCap, as defined in Chapter One, is “an individual’s positive psychological state of development and is characterised by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success” (Luthans, Youssef & Avolio, 2007, p. 10).

Organisations therefore need to recognise the importance of and concentrate on the development of employees’ strengths, rather than focusing on fixing weaknesses and vulnerabilities (Gupta, 2013). PsyCap represents these strengths. PsyCap is needed to not only help organisations and employees cope with the current turbulent socio-economic environment, but also to optimise worker productivity, personal growth and psychological wellbeing.

The aim of this chapter is to investigate the nature of PsyCap, the influence of negative events, such as a psychological recession on employees’ PsyCap and the role that positive HRM practices can play in developing employees’ PsyCap. The starting point is considering where the concept of PsyCap originates from.

4.2 THE BACKGROUND AND FOUNDATION OF PSYCAP

As early as in 1954, Abraham Maslow had argued that psychologists had a tendency of focusing on the “darker, meaner half” of potential (Maslow, 1954). Maslow (1954) proposed that psychology should have a more balanced focus in areas pertaining to growth, development, contentment, self-actualisation and optimism.

In 1998 Martin E.P. Seligman, then-president of the American Psychological Association (APA), advised psychologists to remember psychology's forgotten mission: to develop human strengths and to nurture genius (Compton & Hoffman, 2013). With this realisation, Seligman resolved to use his APA presidency to initiate a shift in psychology's focus toward a positive psychology movement (Linley, Joseph, Harrington & Wood, 2006).

The positive psychology movement supports the idea that psychological strengths and resources, in other words, PsyCap, can shape employee attitudes and contribute to positive, constructive workplace outcomes (Schulz, Luthans & Messersmith, 2014). In theoretical terms, positive psychology refers to the use of psychological theory, research and intervention techniques to understand and influence the positive, adaptive, creative and fulfilling aspects of human behaviour (Compton & Hoffman, 2013). PsyCap therefore stems from the positive psychology movement. This movement has two focus points, one is Positive Organisational Scholarship (POS) and the other Positive Organisational Behaviour (POB). POS is basically the study of positive behaviour while POB focuses on the outcomes of positivity.

POS, a field established by a group of researchers at the University of Michigan, focuses on positive organisational characteristics that facilitate the optimal functioning of an organisation, not only during good times, but also during a period of crisis (Cameron, Dutton & Quinn, 2003). POB, arising from research conducted by the University of Nebraska's Gallup Leadership Institute (Luthans, Youssef & Avolio, 2007), emphasises positive psychological states, for example positive moods, happiness and pleasure, that are measurable, open to development and contribute to constructive employee attitudes and behaviours (Luthans, 2002). Therefore, it seems that POS focuses holistically on organisations while POB emphasises employees and their psychological states.

Although this distinction is made, the two concepts are closely intertwined as it will be hard, if not impossible, to develop positive psychological states in employees if the organisation does not exhibit positive characteristics.

This study focuses on HR strategies that develop PsyCap and therefore falls under the ambit of both POS and POB. HR strategies are part of the organisational characteristics while PsyCap refers to employee behaviour.

Figure 4.1 provides an illustration of the state-trait continuum, that ranges from “pure states” (volatile and momentarily changing such as moods and fleeting emotions) to “pure traits” (genetically determined and nearly impossible to change such as intelligence, eye colour, or height).

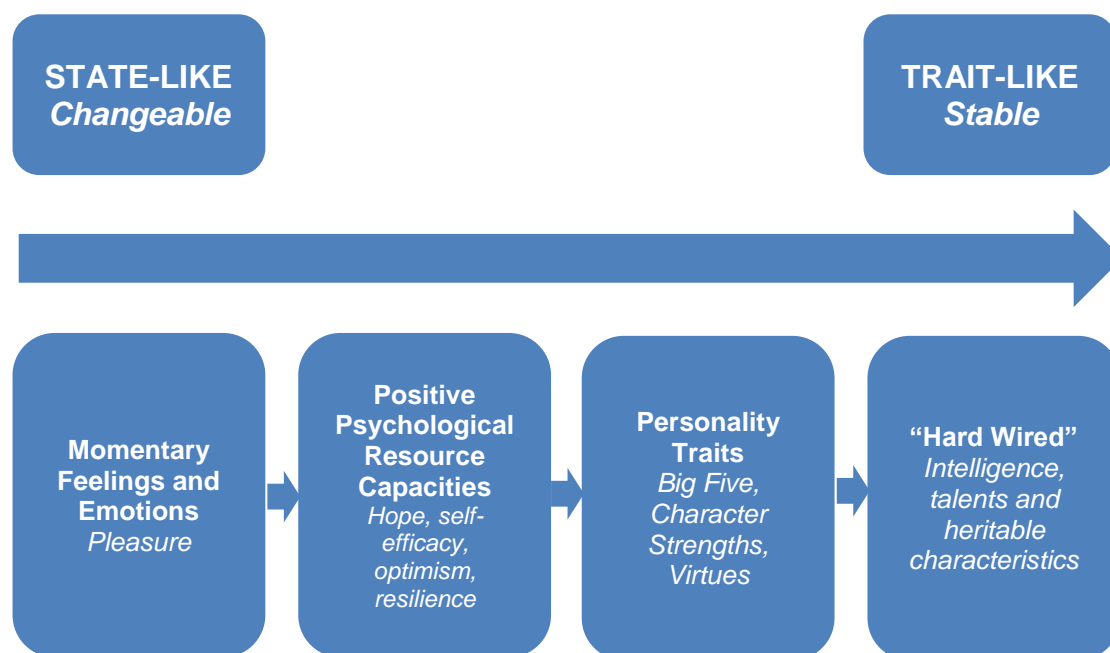


Figure 4.1: The state-trait continuum (Adapted from Luthans, Avolio, Avey and Norman, 2007).

Figure 4.1 further shows that positive traits (e.g. Big Five personality dimensions, core self-evaluations) are stable and applicable across situations, whereas positive state-like capacities, for example emotions and moods, are flexible and open to change and development (Luthans & Youssef, 2007).

Based on Figure 4.1, it is important to note that these state-like capacities fluctuate over time; increasing or decreasing depending on the condition at the time of their assessment (Harris, 2012).

The implication for this study is therefore that PsyCap is not a stable characteristic and it can be changed. In this study, the influence of HR practices as a driver of positive change in PsyCap is investigated. The developmental characteristic of PsyCap as a personal resource or capability is especially relevant in a psychological recession, during which employees are required to emotionally cope with the realities of a cost-driven, fast-paced unpredictable and stressful work environment (Luthans & Youssef, 2007).

For the study of a psychological strength or capacity, such as PsyCap, to be included in the field of POB, certain criteria must be met (Luthans, Avolio, Avey & Norman, 2007):

- The concept must be theoretically grounded and properly researched;
- The measurement of the concept must be valid;
- The concept must be unique to the field of organisational behaviour;
- The concept must fall under state-like (as opposed to trait-like) and open to development; and
- It must have a positive influence on work-related individual-level satisfaction and performance.

Considering the above criteria, it is evident that the study of the concept of PsyCap is located in the field of POB. The reasoning behind this assertion is that since the above criteria were established for POB, numerous positive psychological capacities were considered for inclusion, researched and empirically tested in the workplace (Luthans, Youssef & Avolio, 2007). Four positive psychological constructs were identified that corresponded best with the above POB scientific criteria and these four are namely hope, optimism, resilience and self-efficacy (Luthans, Luthans & Luthans, 2004; Shearon, 2007).

When combined, these four constructs constitute PsyCap (Luthans & Youssef, 2004) and provide individuals with a source of motivational energy that promotes goal achievement and perseverance, regardless of circumstances (Wernsing, 2014).

As already indicated, PsyCap is defined by Luthans, Youssef and Avolio (2007, p. 10) as “an individual’s positive psychological state of development and is characterised by (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success.” In terms of this study, this would imply an employee who is confident, puts in effort towards a desired goal and is optimistic about succeeding and persevering, even when circumstances become challenging. This study focuses on how organisations can assist employees in reaching such a state.

In light of the current turbulent business environment, organisations are required to be flexible, innovative and manage their human resources for optimal organisational performance. For this reason, many organisations have shifted their focus from economic capital to human capital and then to social capital and are now drawing on PsyCap as a means of improving organisational performance (Luthans, Luthans & Luthans, 2004). Under this view, PsyCap goes beyond human and social capital as it focuses on “who you are” and “what you can become” in terms of positive development (Larson & Luthans, 2006) and is differentiated from human capital (“what you know”), social capital (“who you know”) and traditional economic capital (“what you have”) (Xizhou & Xiaoyan, 2013). In other words, PsyCap builds on and adds value to what employees possess, namely financial capital, what people have knowledge of, namely human capital, who employees are acquainted with, namely social capital, whilst encouraging employees’ development in their current state, the actual self, into what they can become in the future, the potential self (Harris, 2012; Luthans & Youssef, 2007).

Therefore, the four components of PsyCap are measurable, open to development and can be managed for more effective work performance (Luthans, Luthans & Luthans, 2004).

Though these are the flagship components of PsyCap, there has been a growing discussion about and identification of other constructs that should be included under the PsyCap umbrella (Luthans & Youssef, 2007; Newman, Ucbasaran, Zhu & Hirst, 2014). As a consequence of further debate, Luthans, Youssef and Avolio (2007) classify these additional constructs as cognitive (creativity and wisdom), affective (wellbeing, flow and humour), social (gratitude, forgiveness, emotional intelligence and spirituality) and higher order (authenticity and courage). However, researchers advise that the inclusion of additional constructs and dimensions without a proper theoretical foundation may cause ambiguity (Newman, Ucbasaran, Zhu & Hirst, 2014).

In conclusion, PsyCap refers to an individual's positive psychological state of development that is characterised by high levels of hope, self-efficacy, resilience and optimism (Harris, 2012). As mentioned earlier, PsyCap capacities are states, rather than enduring traits. Organisations therefore have the opportunity to invest in, develop and manage their employees' overall PsyCap, especially in an environment characterised by a psychological recession, where employees are more likely to feel anxious, stressed and less optimistic. To understand the nature of PsyCap it is necessary to discuss the components of hope, self-efficacy, resilience and optimism in their individual capacities.

4.3 COMPONENTS OF PSYCAP

The four components of PsyCap, namely hope, self-efficacy, resilience and optimism were developed from the works of various researchers which are briefly highlighted below:

- **Hope** is based on the hope theory originally developed by Snyder (2000) who outlined hope as a way of thinking that involves goals, pathways and agency. Snyder (2000) therefore presented hope as a cognitive activity.
- **Self-efficacy** stems from research conducted by Albert Bandura (1997) who defined this construct as a forward-looking expectancy that a person's abilities will be sufficient to meet a particular challenge. Self-efficacy is therefore a person's belief that he or she will cope in future situations due to his or her abilities.

- **Resilience** is based on research developed by Ann Masten (2001) and her colleagues from the University of Minnesota. The resilience research applied to the PsyCap construct draws from the “assets” approach.
- **Optimism** essentially stems from Martin Seligman’s (1998) concept of the positive explanatory style and also incorporates the forward looking style of Scheier and Carver (1985).

In the following section the various components of hope, self-efficacy, resilience and optimism in their individual capacities are further explored.

4.3.1 Hope

One of the elements that is considered most crucial in whether people are motivated to pursue their goals is the expectation or the hope that they will eventually achieve those goals (Compton, 2005). Hope is a theoretical construct originally developed by Snyder (2000). He approached hope as a way of thinking that involves goals, pathways and agency thoughts (Shearon, 2007; Snyder, Irving & Anderson, 1991). Snyder (2000) defines these three components as follows:

- **Goals** refer to endpoints of hopeful thinking and provide a person with direction.
- **Pathways thoughts** refer to the various routes that individuals can follow to ensure goal achievement.
- **Agency thoughts** refer to the motivation and willpower people have to undertake the routes towards goals. Agency thinking translates into a “can do” attitude that reflects individuals’ confidence in their abilities to attain goals.

Life often does not allow a simple pursuit of goals and throws blockages into people’s paths (Snyder, 2000). “Barriers”, a theoretical construct associated with hope, blocks the attainment of goals (Hanson, n.d.). When individuals are confronted with barriers, they can either give up or use pathway thoughts to create new routes for goal attainment (Snyder, 2000).

In essence, hope theory states that hope is the result of individuals believing that they can create both realistic plans and enough drive to achieve their goals (Compton, 2005). Individuals who have high hopes are driven by goals and perceive problems as challenges and opportunities for growth and development (Youssef & Luthans, 2007). Hopeful individuals are more likely to overcome pressure and helplessness by pursuing challenging goals and defining alternative plans to achieve them, making it easier to overcome obstacles and achieve gains (Story, Youssef, Luthans, Barbuto & Bovaird, 2013). According to the learned helplessness theory, exposure to uncontrollable events gives rise to the expectation that events in the future will also be uncontrollable. Such negative expectation would result in depression, demoralisation and passivity (Peterson, Maier & Seligman, 1993).

In addition to the above definition and components of hope, Carlsen, Landsverk Hagen and Mortensen (2012) outline the following qualities of hope:

- **Hope is relational:** Hope prospers when people place themselves in service to others and hope may be a binding force in communities or society at large. Therefore, hope is not just centred in the individual, but is a binding factor with others. To have hope, a person should not isolate him or herself from others.
- **Hope is open-ended:** The experiencing of hope assumes a conviction that the future is open-ended and can be influenced.
- **Hope is sustained by moral dialogue:** The experiencing of hope is sustained by dialogue about human ideals and concerns.
- **Hope is generative:** Hope is a source of positive affect and action and is most generative when it is inclusive, invites open dialogue and expands people's horizons.

Reflecting on the above and specifically in terms of the aim of this study, which is to identify HRM practices that will enhance the development of PsyCap, it is evident that these HRM practices should include a team aspect, values and inclusive dialogue.

Goal attainment are associated with positive emotions and increased performance. In a study conducted by Snyder, Hoza, Pelham, Rapoff, Ware, Danovsky, Highberger, Rubinstein and Stahl (1997), in which the authors tracked research participants over 28 days, it was found, for example, that higher hope was related to the reporting of more positive and fewer negative emotions and thoughts each day.

Similarly, in a six-year longitudinal study, Snyder, Shorey, Cheavens, Pulvers, Adams and Wiklund (2002) focused on students' academic performances throughout their college careers. The study measured students' hope levels in terms of their academic success on entering college, Grade Point Average (GPA) scores at the end of their first and second semesters and cumulative GPA and graduation status at the end of a six-year period. The study revealed the following key findings (Snyder et al., 2002):

- High-hope relative to low-hope students were more likely to have graduated, as these students were able to set clear, specific goals.
- High-hope students were also able to stay focused on their goals and were far less likely to become distracted by counterproductive emotions.
- High-hope students were able to explore multiple pathways to reach their goals and try new approaches. Conversely, low-hope students only focused on one approach and did not explore other avenues.

Studies on PsyCap in the workplace have revealed relationships between hope and various other constructs such as job satisfaction, organisational commitment and job performance. For example Luthans, Avolio, Walumbwa and Li (2005) investigated the relationship among 422 Chinese workers' positive PsyCap states and their performance. The results indicated strong, significant links between PsyCap and employee performance, as rated by their supervisors. In another study conducted by Curry, Snyder, Cook, Ruby and Rehm (1997), the authors investigated hope in student athletes at college level. The study provided evidence that individually measured states of high hope were favourably associated with athletic performance (Curry, Snyder, Cook, Ruby & Rehm, 1997). Some research studies also related hope to favourable organisational outcomes.

Peterson and Luthans (2003), for example, investigated the influence of hopeful leaders on work unit financial performance and subordinate satisfaction and retention. In this study it was found that high-hope as compared to low-hope leaders had more profitable work units, their subordinates were more satisfied and their retention rates were better. It is clear that hope is favourably associated with positive outcomes in the arenas of employee health and wellbeing and individual and organisational performance.

The results of the studies discussed above suggest that hope motivates people to set goals, stay focused, encourage creativity and positively influences performance. These are valuable characteristics in employees, especially during challenging economic times and a psychological recession. One could therefore reason that it is to the benefit of organisations to give cognisance to the concept of hope and provide conditions that will instil hope in their employees.

4.3.2 Self-efficacy

As already indicated, self-efficacy stems from the social cognitive theory originally developed by Albert Bandura. This theory suggests that individuals have a certain level of confidence in their own capacities and ability to succeed in a specific task in a given context (Stajkovic & Luthans, 1998). According to Carr (2004), self-efficacy beliefs are constructed from the following sources of information:

- **Mastery experiences** – Self-efficacy in terms of one's resilience develops from personal mastery experiences in which goals are achieved through overcoming obstacles and determination.
- **Vicarious experience** – Self-efficacy also develops when individuals observe others succeed through sustained effort and willpower.
- **Social persuasion** – Self-efficacy may be strengthened when individuals are persuaded by others that they have the ability to succeed.
- **Physical and emotional states** – Self-efficacy beliefs are optimised when individuals are physically fit and in a positive mood.

Self-efficacy not only has a positive impact on the effort and motivation to accomplish tasks, but also on managing difficult situations and increasing resistance to stress and burnout, which is especially important during challenging times such as during a psychological recession as discussed in the previous chapter. Larson and Luthans (2006) support this by stating that confident, highly-efficacious individuals are more likely to choose challenging tasks, invest in the effort to accomplish these tasks and persevere in the midst of adversity.

According to Luthans and Youssef (2007), self-efficacy represents the best fit with all the criteria-meeting capacities selected for inclusion under the PsyCap umbrella, due to the following reasons:

- Self-efficacy has the most established theoretical foundation and extensive research support.
- Although hope, optimism and resilience have been conceptualised, measured and tested both as states and traits, self-efficacy has been primarily supported and measured as a psychological state.
- The relationship between self-efficacy and work-related performance dimensions is highly established in previous research studies.

The above assertion does not imply that self-efficacy is more important than hope, optimism and resilience, but as a theoretical construct, it fits best into the philosophical and theoretical arena of PsyCap. The positive outcomes of self-efficacy are reflected at three different levels, namely on a motivational, cognitive and emotional level (Carr, 2004):

- At a **motivational level**, individuals with strong self-efficacy beliefs set goals that are challenging and ascribe failure to controllable factors such as insufficient effort and unfavourable circumstances rather than uncontrollable factors such as lack of ability.
- At a **cognitive level**, people with high levels of self-efficacy are more resourceful and have the ability to manage challenging environments. These individuals adopt a future-time perspective to structure their lives and visualise successful outcomes.

- At an **emotional level**, self-efficacy beliefs also regulate emotional states by allowing individuals to interpret potentially threatening demands as manageable challenges. Individuals engage in problem-focused coping to alter potentially threatening environmental circumstances.

Self-efficacy may therefore have the ability to mitigate the negative impact of a psychological recession, as a psychological recession also impacts individuals on a motivational (for example, reduced employee engagement), emotional (for example, anxiety, vulnerability and uncertainty) and cognitive level (for example, depressed views and perceptions).

Several studies have investigated the relationship between self-efficacy and desirable work-related outcomes. Luthans, Zhu and Avolio (2006), for example, analysed the efficacy and work attitudes among employees from the United States and Southeast Asia. The findings revealed that across these two cultures and samples, self-efficacy had a significant positive relationship with organisational commitment and a substantial negative relationship with employees' turnover intent (Luthans, Zhu & Avolio, 2006).

Regarding leadership effectiveness, Chemers, Watson and May (2000) examined the impact of leadership efficacy and optimism on the evaluation and performance of military cadet leaders. The findings revealed that efficacy was strongly associated with rated leadership potential (Chemers, Watson & May, 2000). Self-efficacy has also been linked to motivation and performance. In a meta-analytical study conducted by Bandura and Locke (2003), the findings revealed that perceived self-efficacy and personal goals enhance motivation and performance attainments. Similarly, Stajkovic and Luthans (1998) conducted a meta-analysis involving 114 research studies that examined the relationship between self-efficacy and work-related performance.

According to results obtained from the primary meta-analysis, a significant relationship was found between self-efficacy and work-related performance (Stajkovic & Luthans, 1998).

Strong self-efficacy beliefs also enhance improved immune system functioning, greater resilience and better psychological and social adjustment (Carr, 2004).

It is therefore evident that self-efficacy has a positive impact on constructive work-related attitudes such as organisational commitment, turnover intent, motivation and performance (Bandura & Locke, 2003; Luthans, Zhu & Avolio, 2006), as well as better physical health and psychosocial adjustment (Carr, 2004). These positive outcomes associated with self-efficacy may also serve as a potential buffer against the negative effects of a psychological recession.

4.3.3 Resilience

If organisations and employees are to successfully navigate through a psychological recession, the development of resilience is imperative. Resilient employees have the ability to “bounce back” from adversity, uncertainty, conflict and increased responsibilities (Larson & Luthans, 2006; Luthans, 2002;). Resilience is based on exposure to significant threat or adversity and on the attainment of good outcomes despite this exposure (Linley & Joseph, 2004). Based on extensive work done by positive psychologist Ann Masten (2001), it is acknowledged that resilience includes a proactive assessment of risks and personal assets to deal with risks (Masten, 2001).

Risks are defined as any predictor that leads to undesirable outcomes while having no effect if there is no occurrence (Luthans, Vogelgesang & Lester, 2006). Risks in everyday life can, for example, take the form of a potential illness that can lead to the loss of a family member. However, if the loved one never becomes sick, the risk has no impact on the individual and does not negatively impact his or her resilience (Luthans, Vogelgesang & Lester, 2006). Regarding a psychological recession, risks can include macro-level threats such as socio-economic instability, or micro-level internal threats such as retrenchments and organisational restructuring (Luthans & Youssef, 2007).

On the other hand, Masten and Reed (2002) define **personal assets** as any predictor that leads to positive outcomes while having no influence if they are absent. Personal assets could, for example, take on the form of cognitive abilities, temperament, positive self-perceptions, faith, emotional stability, and a positive outlook on life (Luthans, Youssef-Morgan & Avolio, 2015). The common psychological profiles of resilient individuals include a staunch acceptance of reality, a firm belief that life is meaningful and the ability to improvise and adapt to significant change (Luthans, 2002).

Resilient employees view adversities and setbacks as opportunities for learning, growth and development (Luthans & Youssef, 2007). Traditional conceptualisations viewed resilience as an extraordinary capacity that can only be observed and admired in highly unique individuals. However, the POB perspective on resilience is that it is a learnable capacity that can be developed in ordinary people and measured as a psychological state (Luthans & Youssef, 2007). Research focusing on resilient employees largely echoes the work conducted in positive and clinical psychology. Individuals with high levels of resilience tend to be better at adapting in the face of negative experiences and changes in the external environment, such as organisational restructuring and downsizing (Newman, Usbasaran, Zhu & Hirst, 2014).

The effect of resilience on adaptation was demonstrated by Maddi (1987) who studied 13 000 employees that were retrenched within one year from Illinois Bell Telephone (IBT) Company. During this time, company goals, strategies, job descriptions, and supervisory personnel changed month by month (The Hardiness Institute, n.d.). For one manager, for example, it resulted in having ten different supervisors in one year (Maddi, 1987).

Decision-makers at IBT encouraged Dr Maddi and his team of researchers to develop a training programme for troubled employees that would assist employees to build key attitudes and resources for turning change to opportunity. As part of the training programme, weekly one-hour training sessions were held with employees over a 15-week period.

After completion of the training intervention, it was found that two-thirds of the employees experienced significant performance, leadership and health declines as a result of the retrenchment exercise, while one-third of employees thrived while being exposed to the same disruption and stressful environment (Larson & Luthans, 2006; Maddi, 1987).

These resilient employees were able to sustain their happiness, health and performance levels and even experienced improved enthusiasm (Maddi, 1987). Maddi has found hardiness as a key to resilience for not only surviving, but also to thrive under stressful circumstances (Maddi, 1987). According to Cardwell and Flanagan (2005), hardiness is defined as a personality type comprising three general dispositions:

- **Control:** Hardy individuals see themselves as being in control of their lives. They attribute control to themselves rather than to external factors that are beyond their control.
- **Commitment:** Hardy individuals are involved in the world around them and have a strong sense of purpose in life.
- **Challenge:** Hardy people see changes in life as challenges to be overcome rather than as threats and stressors. They see change as an opportunity for personal growth and development.

In another study, Marques Martins Amaral (2013) investigated the experiences of ten expatriates during the economic downturn in Portugal. Expatriates' adjustment to a new country is generally a stressful process and is expected to be even more so during a financial crisis. Following a phenomenological research study that included in-depth interviews with participants, it was found that resilient expatriates continuously reinvented themselves and their methods of working, by energising themselves to become more productive. In the face of adversity, resilient expatriates reasoned that challenges would trigger growth and provide learning opportunities (Marques Martins Amaral, 2013).

In summary, the above research highlights the importance of developing employees' resilience, especially during a psychological recession.

Financial strain, job insecurity and poor socio-economic conditions can lead people to feel overwhelmed and stressed. Fostering resilience in organisations is therefore crucial for employees to successfully navigate through a psychological recession.

4.3.4 Optimism

Optimism was first conceptualised by Scheier and Carver (1985) and is defined as a generalised expectancy that the future will be positive. Optimistic individuals believe that positive events are a result of their own capacities and abilities, whereas negative ones are due to external factors (Seligman, 1998). Two main approaches to the measurement of optimism have been taken (Carr, 2004). At one extreme, optimism is conceptualised as a personality trait (dispositional), while at the other side of the continuum, it is interpreted as an explanatory style (Carr, 2004).

Concerning optimism as an explanatory style, optimistic individuals explain negative events or experiences by attributing the cause of these to external, unstable and specific factors. In other words, optimists interpret bad events as external and not their fault, unstable as it just happened this one time and specific as this event only, while pessimists, on the other hand, make the opposite attributions of internal, stable and global (Luthans & Youssef, 2007).

During challenging times, optimism is key as it enables individuals to continue to exert effort even in the face of increasing adversity (Carver & Scheier, 2002). On the surface, hope and optimism appear very similar. Like hope, optimism is a positive anticipatory state; thus it is not surprising that hope and optimism are sometimes portrayed as similar constructs in the psychological literature (Bruininks & Malle, 2005) and this is also due to the fact that the interdependence of these two factors has been established in research.

There are, however, also substantial theoretical and empirical studies that explain the conceptual independence between efficacy, hope and optimism (Luthans & Jensen, 2002; Luthans & Youssef, 2007; Snyder, 2000).

Bryant and Cvengros (2004), while using structural equation modelling to test the independence between hope and optimism, found that hope focuses more directly on the personal attainment of specific goals, whereas optimism concentrates more broadly on the expected quality of future outcomes in general. In other words, hope is more goal-specific and optimism is more generalised.

In a similar study to that of Bryant and Cvengros (2004), Bruininks and Malle (2005) found that hope is distinct from optimism due to differences in their represented outcomes. Individuals were found to be optimistic more often about general outcomes, for example, today will be a good day, whereas they would hope for specific outcomes such as recovering from a cold. The findings of these researchers are therefore congruent. In other words, individuals would hope for things that are more personally relevant to them and more specific, whereas they will be optimistic for a broader range of outcomes, which are more general in nature (Bruininks & Malle, 2005).

It appears, from the theory on hope and optimism presented in this section, that optimism is a general positive orientation or expectancy in the person (Scheier & Carver, 1985). Hope, however, implies a more external and goal-oriented focus, which includes goals, finding pathways to goals and acting as an agent (Shearon, 2007; Snyder, Irving & Anderson, 1991). It appears that optimism is a general internal state and hope is a cognitive willing of specific desirable outcomes.

Concerning positive outcomes associated with optimism, Seligman and Schulman (1986) have found that optimism predicts sales productivity among salespeople in various industries and companies. The authors conducted a research study at two insurance companies and found that highly optimistic salespeople sold significantly more insurance policies and were less like to quit than their pessimistic counterparts (Seligman & Schulman, 1986). Studying leadership, Wunderly, Reddy and Dember (1998) investigated optimism and pessimism among business leaders.

Business leaders had to respond to three instruments: the Leadership Practices Inventory, the Kirton Adaption-Innovation Inventory and a measure of optimism and pessimism. As predicted, the results indicated that higher optimism levels in leaders positively influenced followers' optimism, satisfaction, retention, and stress (Wunderly, Reddy & Dember, 1998). Individuals high in optimism experience better moods, seem to be more successful and persevering and experience better physical health (Wunderly, Reddy & Dember, 1998). Marques Martins Amaral (2013) cautions that optimism should be realistic, as naïve optimism can contribute to poor managerial decisions. It is therefore imperative that individuals make sensible plans to ensure that their endeavours succeed (Bergh & Geldenhuys, 2013).

Based on the above literature, optimists are assets to organisations as they are likely to deal with turbulent environments and embrace the continuous changes more readily than pessimists (Luthans, Youssef & Avolio, 2007). Optimism is therefore crucial during a psychological recession as employees will be able to continue to exert effort during difficult times (Carver & Scheier, 2002; Luthans & Youssef, 2007).

In the previous section, the PsyCap dimensions of hope, resilience, self-efficacy and optimism were discussed in their individual capacities, while in the next section, the positive outcomes associated with PsyCap are explored.

4.4 POSITIVE OUTCOMES ASSOCIATED WITH PSYCAP

The positive outcomes associated with concepts related to PsyCap are shared in this section. Several research studies investigated the important role that positivity play in psychological wellbeing. Lyubormirsky, King and Diener (2005), for example, conducted a meta-analysis of cross-sectional, longitudinal and experimental studies pertaining to the benefits associated with positivity. The authors concluded that happier, positive individuals have stronger immune systems, are physically healthier and live longer. Graham, Eggers and Sukhtankar (2004) used panel data from Russia to assess the relationship between happiness and wellness.

The authors found that individuals who reported higher levels of happiness in 1995 made more money and were in better health in a survey conducted five years later.

Employees who have high levels of PsyCap expect good things to happen at work (optimism), believe that they create their own success (efficacy and hope) and are resistant to setbacks (resilience), as opposed to individuals who have lower levels of PsyCap (Avey, Reichard, Luthans & Mhatre, 2011).

The following sections provide an overview of literature that shows the influence of PsyCap on employee attitudes and behaviour, individual and organisational performance and employee wellbeing.

4.4.1 Employee attitudes and behaviour

PsyCap is directly related to the way in which people think and act in organisational settings (Avey, Wernsing & Luthans, 2008). Avey, Wernsing and Luthans (2008), for example, refer to a research study that Lazarus and Folkman (1984) conducted, demonstrating that people can react differently to the same event – one person may react with stressful emotions while another may not when encountering the same challenging situation (Yardley, 2012).

In other words, high levels of PsyCap can assist people to navigate through stressful organisational situations (Yardley, 2012). Figure 4.2 shows that employees who possess high levels of PsyCap experience more positive emotions, even when faced with challenging or stressful situations.

Several studies have investigated the influence of PsyCap on desirable and undesirable employee behaviours. According to a meta-analysis involving 51 independent research samples, Avey, Reichard, Luthans and Mhatre (2011) found strong positive relationships between PsyCap and desirable employee attitudes, for example, organisational commitment, wellbeing and satisfaction, and behaviours such as organisational citizenship behaviour.

A negative relationship was indicated with destructive attitudes, for example stress, anxiety, turnover intent and cynicism, and behaviours, for example deviant workplace behaviours.

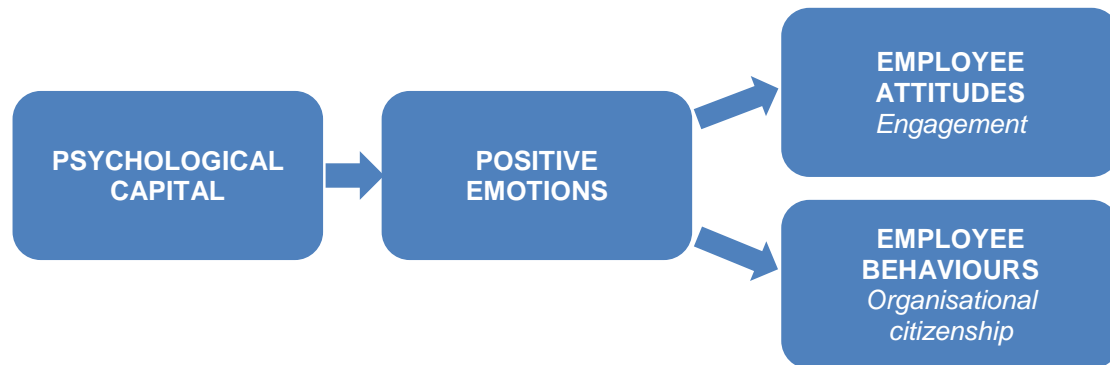


Figure 4.2: The influence of PsyCap on employee attitudes and behaviours (Adapted from Avey, Wernsing & Luthans, 2008).

In a similar study, Avey, Luthans and Jensen (2009) also found a negative relationship between positive PsyCap and destructive behaviours such as stress symptoms and intentions to quit. Regarding absenteeism, Avey, Patera and West (2006) investigated the impact of positive PsyCap on employee absenteeism. The results indicated an inverse relationship between PsyCap and both voluntary and involuntary absenteeism. Lok (2011) investigated the roles of positive emotions and PsyCap on turnover intentions among police officers. The results obtained from structural equation modelling showed that PsyCap associated indirectly with turnover intentions. Therefore, when police officers frequently experience a positive state, they are less likely to think of leaving their current job.

The above research findings suggest that the four core components of PsyCap have the potential to predispose employees to a greater sense of positivity at work. In the previous chapter work-family conflict was discussed as an aspect of a psychological recession. In this respect, Karatepe and Karadas (2014) investigated the impact of PsyCap on work-family conflict. Based on research data collected from frontline hotel employees in Romania, it was found that PsyCap alleviates work-family conflict.

These findings highlight the potential of PsyCap to not only influence employees' attitudes and behaviours at work and at home, but also to relieve the tension around work-life.

To understand the negative relationship between PsyCap and counterproductive work behaviour, researchers have pointed to the root causes of counterproductive work behaviour. According to a model developed by Fox and Spector (1999), employees who are exposed to stressors in their work environment may engage in counterproductive work behaviours as a result of these stressors. Employees who have a high level of PsyCap would be less likely to engage in counterproductive work behaviours, as their resilience will allow them to manage stressors better, while preventing the onset of frustration and distress. In addition to this, higher levels of hope may enable employees to explore alternative pathways to overcome these stressors. Lastly, optimistic employees will have positive expectations about the future, thus eliminating the frustration that results in counterproductive work behaviour (Avey, Reichard, Luthans & Mhatre, 2011).

Concerning organisational change, employees' overall PsyCap can also help drive positive emotions and assist with maintaining a positive organisational culture during periods of organisational change. Avey, Wernsing and Luthans (2008), for example, investigated the impact of PsyCap during periods of organisational change. The authors also explored the idea that PsyCap could help maintain a more positive organisational climate during periods of change. The results revealed that employees' PsyCap was directly related to positive emotions and desirable outcomes such as employee engagement and organisational citizenship behaviours. Employees who have higher levels of PsyCap are therefore more likely to support effective organisational change and view the process as favourably, while being less likely to engage in destructive and negative attitudes and behaviours (Avey, Wernsing & Luthans, 2008).

4.4.2 Employee wellbeing

Given the context of a psychological recession where employees experience heightened levels of psychological distress, positive PsyCap can play a vital role in contributing towards psychological wellbeing and improving the overall quality of employees' work and personal lives. Avey, Luthans, Smith and Palmer (2010), for example, investigated the impact of positive PsyCap on employee wellbeing over time. The study provided evidence that positive resources, such as PsyCap, lead to employees' psychological wellbeing (Avey, Luthans, Smith & Palmer, 2010).

In another study conducted by Avey, Luthans and Jensen (2009), the authors reported negative relationships between PsyCap and stress and anxiety. In a similar study, Riolli, Savicki and Richards (2012) examined the influence of PsyCap on the wellbeing of university undergraduate students during an academic semester. As hypothesised, the results indicated that PsyCap empowered students with the necessary mental strength to cope with difficulties. Furthermore, PsyCap contributed towards the enhancement of life satisfaction and served as a buffer against the negative impact of stress (Riolli, Savicki & Richards, 2012).

Baron, Franklin and Hmieleski (2013) investigated the impact of PsyCap on entrepreneurs' stress levels, as these individuals are often exposed to rapid changes, unpredictable environments, work overload and personal responsibility for others. The findings indicated that entrepreneurs' low levels of stress are derived from high levels of PsyCap. Additional findings indicated that stress was negatively related to entrepreneurs' subjective wellbeing. In summary, the research study confirmed the potential stress-reducing effects of positive PsyCap (Baron, Franklin & Hmieleski, 2013).

Regarding unemployment and job loss, another component of a psychological recession, Cole, Daly and Mak (2009) investigated the mediating role of positive PsyCap between labour market status and wellbeing.

The research findings highlighted significant relationships between labour market status and wellbeing, namely that employees who were in employment had higher wellbeing and those with higher wellbeing were more likely to be employed. Furthermore, individuals with higher levels of PsyCap also had higher levels of wellbeing, which assisted them to re-enter the labour market more confidently and secure employment.

In summary, the research study offers some support that PsyCap can mediate the impact of unemployment and help facilitate re-employment (Cole, Daly & Mak, 2009).

4.4.3 Individual and organisational performance

According to theory, individuals who have high levels of positive PsyCap have more resources that will assist them to pursue their goals and therefore can perform better than those low in PsyCap. Luthans, Avolio, Avey and Norman (2007) found, for example, that employees' PsyCap was positively related to their job performance and that it accounted for higher levels of performance over and above personality and core self-evaluations. Similarly, Avey, Nimnicht and Pigeon (2010) conducted two research studies by examining the association between PsyCap and employee performance. The study involved two samples in a large Australian financial firm. As hypothesised, the results indicated that employees' PsyCap was positively related to their level of performance, as well as manager-rated performance. This particular research study successfully demonstrated that PsyCap is associated with multiple measures of employee performance.

Regarding students' academic performance, Luthans, Luthans and Jensen (2012) investigated the impact of business school students' PsyCap on their academic performance. The authors essentially tested the relationship between business students' PsyCap and their GPA scores. The results from this explanatory research study were the first to demonstrate a significant relationship between the PsyCap of business college students and their academic performance.

Furthermore, the results also suggested that tertiary institutions should integrate short interventions aimed at developing students' PsyCap, which alludes to the importance of organisations developing the PsyCap of their employees. Due to increased competitiveness in today's marketplace, organisations have come to emphasise innovation and creativity as a means to achieve sustainable competitive advantage (Lim & Choi, 2009). PsyCap has been found to influence employees' creative performance, problem-solving and innovation (Newman, Ucbasaran, Zhu & Hirst, 2014). Drawing on a large sample of 899 working adults, Sweetman, Luthans, Avey and Luthans (2011) found that PsyCap predicted creative performance among employees.

In a similar study conducted by Rego, Sousa, Marques and Cunha (2012), the results indicated the importance of PsyCap in fostering employees' creativity, which is a critical resource for helping organisations to face competitive challenges, take advantage of business opportunities and improve organisational effectiveness (Rego, Sousa, Marques & Cunha, 2012).

4.5 THE INFLUENCE OF A PSYCHOLOGICAL RECESSION ON PSYCAP

As discussed in the previous chapters, the global economic turmoil contributed to a host of problems in the workplace, including social issues like unemployment, fears of job losses, hopelessness and general pessimism. A number of organisations were forced to implement hiring freezes, layoffs and other forms of organisational restructuring. Organisations of all sizes faced uncertainty as they did not know if they had the financial strength to survive the economic recession.

In Chapter One it was noted that the global economic downturn resulted in increasing rates of unemployment, "too-big-to-fail" organisations that closed down and bursting bubbles in the housing and financial markets. In Chapter Two, the human toll was evidenced by major concerns for decreased psychological wellbeing, feelings of alienation, helplessness and vulnerability among the chronically unemployed (Luthans, Youssef-Morgan & Avolio, 2015).

Many organisational leaders and employees have lost hope and confidence in their abilities to remain competitive and questioning the sustainable competitiveness of their organisations in a turbulent global environment (Luthans, Youssef-Morgan & Avolio, 2015). Various research studies have identified factors that can optimise or inhibit the formation of individual-level PsyCap (Avey, 2014; Newman, Ucbasaran, Zhu & Hirst, 2014).

A psychological recession, as illustrated in Chapter Three, can inhibit the development of employees' PsyCap. Although several research studies suggest that PsyCap can act as a buffer to counteract the negative impact of stressful work environments (Abbas, Raja, Darr & Bouckennooghe, 2014; Roberts, Scherer & Bowyer, 2011), a small number of studies also suggest that stress at work may reduce employees' PsyCap (Epitropaki, 2013; Liu, Chang, Fu, Wang & Wang, 2012; Newman, Ucbasaran, Zhu & Hirst, 2014; Wang, Liu, Wang & Wang, 2012).

In a study conducted by Liu, Chang, Fu, Wang and Wang (2012) the authors, for example, examined how PsyCap mediated the relationship between occupational stress and depressive symptoms among Chinese physicians, an occupational group that is usually exposed to a high level of work-related stress (Liu, Chang, Fu, Wang & Wang, 2012). The results revealed that PsyCap was affected by various workplace factors. A significant, negative association between stress-related symptoms and PsyCap was reported among Chinese physicians. In other words, individuals who work in stressful environments may exhibit lower levels of PsyCap than those who are exposed to less stressful experiences (Liu, Chang, Fu, Wang & Wang, 2012; Newman, Ucbasaran, Zhu & Hirst, 2014).

Work-family conflict, another component of a psychological recession, also negatively affects employees' PsyCap. In a study conducted by Wang, Liu, Wang and Wang (2012), the authors investigated the relationship between work-family conflict and burnout among Chinese female nurses.

Although PsyCap acted as a positive resource to combat burnout, nurses who perceived more work-interfering family conflict were more likely to experience lower levels of PsyCap which in turn, increased the possibility of developing emotional exhaustion and cynicism (Wang, Liu, Wang & Wang, 2012). In a similar study conducted by Li, McMurray and Stanley (2008), the authors concluded that working parents without support have reduced parenting capacity as they have reduced psychological capital as a result of work-related stress and depression.

Concerning unemployment and job insecurity, Epitropaki (2013) investigated the role of PsyCap for managing employment uncertainty in adverse labour market conditions. Based on structural equation modelling of a sample of 207 employed professionals from 24 organisations in Greece, the study demonstrated that higher levels of employment uncertainty contributed to lower levels of PsyCap, which in turn predicted higher stress levels.

The above findings support the literature discussed in Chapter Three, where it was noted that job loss, unemployment and retrenchment pose negative psychological consequences for individuals (Clark, Georgellis & Sanfrey, 2001; Furnham, 2013). In a study conducted by Cole (2006), the author investigated the relationships between wellbeing, PsyCap and unemployment. The results of the study indicated that a person's level of PsyCap significantly influences wellbeing and helps facilitate re-entry into the labour market. A person's PsyCap, however, deteriorates the longer he or she remains unemployed, which may hinder re-employment and result in long-term unemployment and psychological scarring (Cole, 2006).

As a psychological recession is characterised by feelings of being alone and vulnerable (Bardwick, 2008), Seaton (2011) investigated the impact of belonging uncertainty on individuals' PsyCap. Belonging uncertainty, defined as a concern for one's social ties, has a negative impact on psychological wellbeing, as individuals are concerned that they do not fit in their current environment (Seaton, 2011).

The research findings indicated that high levels of uncertainty reduced individuals' PsyCap, and in turn, their psychological wellbeing. Regarding psychological distress, another component of a psychological recession, Wu (2011) investigated the relationships among life stress, psychological capital and depression among college students. Through structural equation modelling, the results indicated that life stress, measured as a separate variable, had a negative influence on the development on students' PsyCap.

Although the global environment conveys plenty of reasons for employees to feel stressed, pessimistic and hopeless, organisations need to focus on rebuilding their employees' PsyCap and focus on understanding how to optimise hope, efficacy, resilience, and optimism (Luthans, Youssef-Morgan & Avolio, 2015), especially during a psychological recession. Positive psychology, as discussed in the introductory section, can assist organisations to rebuild employees' PsyCap so that they can confront unusual and difficult circumstances (Toor, 2010). The next section will focus on how organisational-level variables, specifically HRM practices, can influence the development of employees' PsyCap in a post-recession environment.

4.6 THE ROLE OF HRM PRACTICES IN DEVELOPING PSYCAP

Several researchers propose that a universally set of HRM practices positively impacts organisational performance. These “bundles” of HRM practices are also referred to as “high-performance work systems”, “high commitment HRM” or “high-involvement HRM” (Marchington and Wilkinson, 2005). High-performance work systems have also been defined as a group of separate but interconnected HRM practices, for example, recruitment, selection, training, compensation and performance management designed to enhance employee and organisational effectiveness (Simmons, 2011). Pfeffer (1998) proposed the following bundle of HRM practices that have the potential to improve organisational performance and effectiveness:

- Employment security;
- Selective hiring and sophisticated selection practices;
- Extensive training, learning and development;
- Employee involvement, information sharing and worker voice;

- Teamwork;
- Reduction of status differences; and
- Performance-based rewards

Numerous studies explored the relationship between the above HRM practices and their ability to enhance organisational performance, lower absenteeism and labour turnover and improve constructive employee attitudes and behaviours. Huselid (1995), for example, investigated the impact of HRM practices on labour turnover, productivity and corporate financial performance. The results indicated that HRM practices have an economically and statistically significant impact on turnover and productivity. Mahmood, Iqbal and Sahu (2014) explored the impact of HRM practices on employee performance in the banking industry of Pakistan. Inferential statistical analysis revealed that reward practices, recruitment and selection and training practices positively influence employee performance.

Regarding positive employee attitudes and behaviours, Sourchi and Liao (2015) found that an increase in the number of high-performance work systems positively influenced organisational commitment, proactive behaviour and creativity. Similarly, a study conducted by Messersmith, Patel, Lepak and Gould-Williams (2011) examined both the direct influence of HRM practices on departmental performance and how these practices impact departmental performance indirectly by influencing employee attitudes and other discretionary behaviours.

The employee attitudes that were investigated included organisational commitment, job satisfaction and empowerment. The results of the study revealed that HRM practices had a significant positive influence on these attitudes and these attitudes in turn contributed to organisational citizenship behaviour (Messersmith, Patel, Lepak & Gould-Williams, 2011; Simmons, 2011). Furthermore, departmental performance was affected both directly by HRM practices and indirectly via organisational citizenship behaviour of employees (Messersmith, Patel, Lepak & Gould-Williams, 2011; Simmons, 2011).

The study further demonstrated that building an effective HR system contributes towards the development of a positive work environment, as employees engage in various constructive behaviours and attitudes (Messersmith, Patel, Lepak & Gould-Williams, 2011; Simmons, 2011). In summary, investing in the selection, training, information sharing, compensation and performance management processes have a positive impact on positive employee attitudes and behaviours and may pay further dividends with higher organisational performance and service quality (Messersmith, Patel, Lepak & Gould-Williams, 2011).

HRM practices also act as communicating mechanisms or vehicles (Sonnenberg, Koene & Paauwe, 2011), signalling to employees that the organisation views them as a strategic resource, recognises their contribution, cares for their wellbeing and invests in their development (Gupta, 2013). These signals also create a positive organisational-level psychological climate, which in turn promotes the positive development of employees' psychological state (Bozionelos & Miao, 2014; James, Choi, Ko, McNeil, Minton & Wright, 2008).

The above findings demonstrate the value of HRM practices in creating a supportive organisational environment that not only positively impacts on individual and organisational performance, but also elicits positive employee behaviours and capabilities that contribute to the organisation's competitive advantage (Collins & Smith, 2006).

A supportive organisational climate is defined as the overall amount of perceived support employees receive from their supervisors (Bozionelos & Miao, 2014). These perceptions may create positive conditions necessary for PsyCap to flourish and develop (Luthans, Norman, Avolio & Avey, 2008). According to Newman, Ucbasaran, Zhi and Hirst (2014) there is room for investigating the impact of organisational-level variables such as HR systems and practices on the development and enhancement of PsyCap. Gupta (2013) and Bozionelos and Miao (2014) support this by stating that there has been no systematic study of the impact of various HRM practices on PsyCap.

HRM practices can act as support mechanisms that can optimise employees' PsyCap. This is mainly due to the fact that PsyCap can be invested in and managed, as the four PsyCap components are open to development and enhancement by means of workplace interventions and proactive management (Luthans, Luthans & Luthans, 2004). The implication of such knowledge for the present study is crucial, as the potential to increase PsyCap may have benefits for the organisation and employees on which the study is based.

Luthans, Avey and Patera (2008) found that PsyCap can be developed through training interventions. The PsyCap Intervention (PCI), consisting of short one to three-hour workshops, has been found to significantly maximise participants' PsyCap levels. These workshops generally follow the PCI model shown in Figure 4.3 on the following page. Based on Figure 4.3, the PCI is intended to affect each state as well as the overall level of PsyCap for performance impact (Luthans, Youssef & Avolio, 2007). Luthans, Avey, Avolio and Peterson (2010) found that short training interventions such as the PCI not only develops individual-level PsyCap, but also leads to an improvement in employees' on-the-job performance. In a similar study, Dello Russo and Stoykova (2014) explored the longer term effects of the PCI. Statistical analyses revealed significant improvements in participants' overall PsyCap after training. Remarkably, these improvements remained stable over one month, proving the durability of the PCI (Dello Russo & Stoykova, 2014).

Concerning web-based training interventions, Luthans, Avey and Patera (2008) conducted an experimental analysis of a web-based training intervention to develop positive PsyCap. The authors found strong support that PsyCap can be developed through a highly focused, two-hour web-based training intervention (Luthans, Avey & Patera, 2008). According to Dello Russo and Stoykova (2015), each of the four psychological constructs encompassed in PsyCap can be developed through specific exercises during the PCI workshop. These exercises and activities can be summarised as follows (Dello Russo & Stoykova, 2015; Gupta, 2013):

- **Hope** – Facilitators should focus on stimulating participants to become more pragmatic through goal-setting.
- **Self-efficacy** – This component is addressed through three sources of efficacy beliefs, namely active mastery, vicarious learning and positive feedback.
- **Optimism** – Participants should engage in self-talk, which is a technique used to rephrase negative and self-debilitating thoughts. This will allow participants to increase positive expectations and attributions.

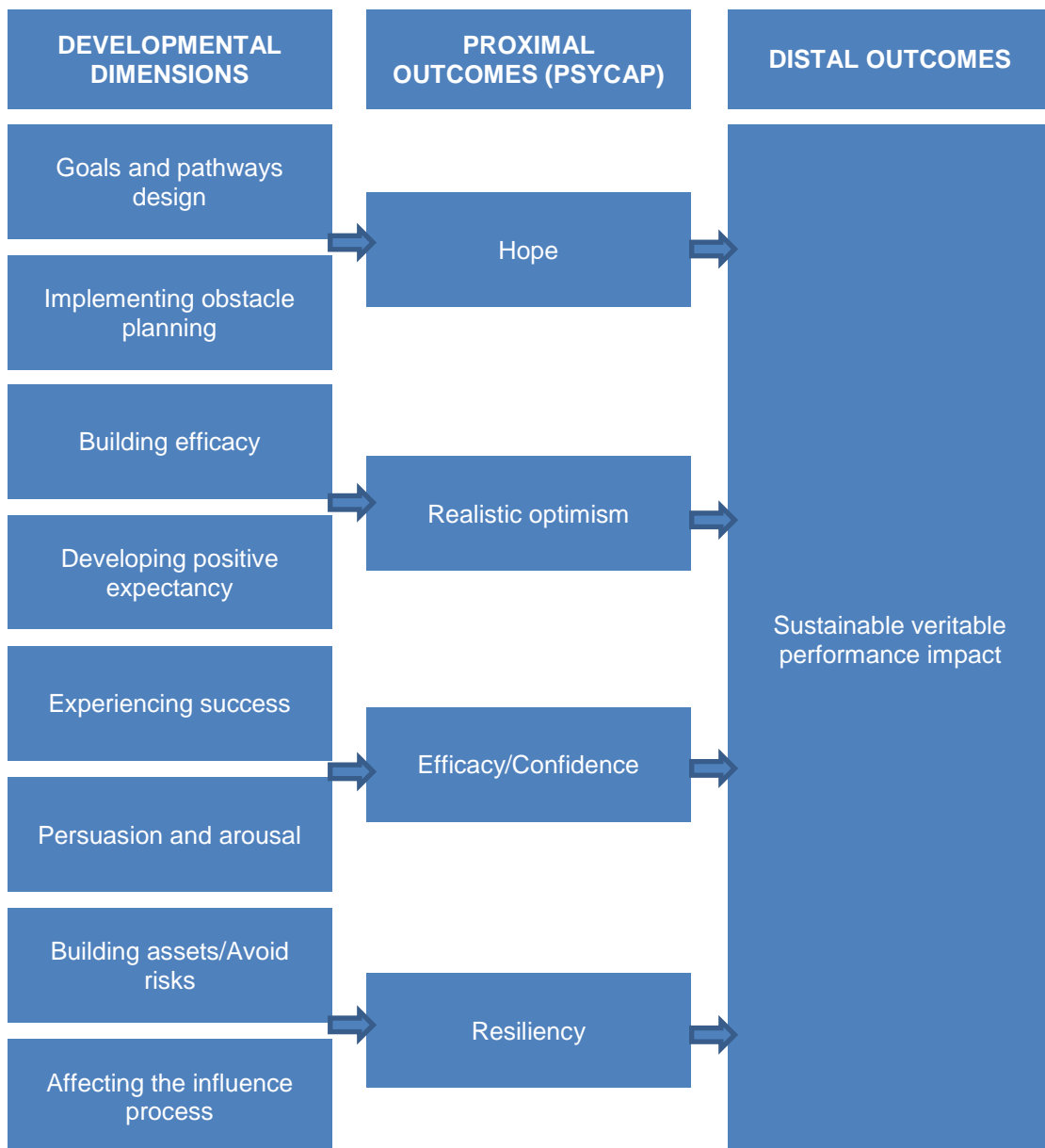


Figure 4.3: The Psychological Capital Intervention (PCI) (Adapted from Luthans, Youssef & Avolio, 2007).

- **Resilience** – Facilitators should activate cognitive, emotional and behavioural processes that can change an individual's perception of his or her influence on external conditions. An exercise that enables the visualisation and anticipation of possible setbacks will, for example, allow participants to increase their ability to mentally reframe those circumstances.

Based on the above literature reviewed, it is clear that the PCI has the potential to not only increase individual-level performance, but also escalate organisational effectiveness. An organisation's Human Resources Development (HRD) function can implement the PCI to take advantage of the synergistic effects of PsyCap for enhancing performance and constructive employee attitudes and behaviours, especially during a psychological recession.

Knowledge of the various HRM practices that can enhance PsyCap can assist organisations to develop programmes and practices that will strengthen their employees' PsyCap. According to Gupta (2013) organisations can develop the four PsyCap components through the deployment of various positive HRM practices:

- **Self-efficacy** can be developed through empowerment and training and development interventions that involve the enhancement of mastery experiences, vicarious positive experiences, positively-oriented persuasion, physiological and psychological arousal.
- **Optimism** can be enhanced and developed through coaching and mentoring, information-sharing practices, empowerment, training and development and socialisation practices.
- **Resilience** is developed during the coaching and mentoring process, where the coach or mentor uses positive emotions to alter the perceived level of risk or personal assets. Fostering self-enhancement and development through competency development practices can also enhance the development of an employee's resilience.

- **Hope** can be developed through goal design acceptance and commitment, through empowerment, pathways generation through sharing information and empowerment, developing alternate pathways through training interventions and overcoming obstacles.

Regarding recruitment and selection, Nigah, Davis and Hurrell (2012) found that buddying, a socialisation mechanism that is commonly used by organisations to support newly hired employees, led to higher levels of PsyCap. The purpose of a workplace buddy is to assist new employees to settle into their workplace and become part of the organisation. A workplace buddy is responsible for the following (Office of the Commissioner for Public Employment, 2011):

- Show new employees around the workplace and introduce them to the rest of the staff;
- Help new employees understand what type of behaviour is expected in the workplace;
- Be a point of contact for when the person is not sure who he or she should ask for help; and
- Recognise when the person may require assistance and take appropriate action.

Nigah, Davis and Hurrell's (2012) study was conducted within a professional services organisation wherein data were collected from 78 graduate newcomers in receipt of buddying. Newcomers' satisfaction with buddying was found to have a positive relationship with PsyCap and engagement.

In summary, Nigah, Davis and Hurrell's (2012) study shows that positively-oriented HRM practices have the ability to develop employees' personal resources (such as PsyCap). In a study conducted by Bozionelos and Miao (2014), the authors investigated the impact of organisational-level HRM practices on PsyCap. Data was collected from 722 frontline employees of 48 high-tech manufacturing enterprises, located in six cities in northeast China.

The results of the study revealed that HRM practices not only enhanced PsyCap, but also increased the levels of job satisfaction and affective commitment (Bozionelos and Miao, 2014). The study also highlighted the need for organisations to deploy specific HRM practices to benefit from the synergies of positive PsyCap for employee attitudes improvement (Bozionelos & Miao, 2014).

In summary, the above literature demonstrates the positive impact of HRM practices on PsyCap and constructive employee attitudes. Specific HRM practices revealed in this section which should be considered to increase PsyCap include training and development, empowerment practices, information-sharing practices, sophisticated recruitment, selection and induction practices, for example, buddying, and fostering a supportive organisational climate where employees feel valued and supported.

In the face of a psychological recession, the above literature highlights the need for HR practitioners and managers to embrace the core elements of POB, as these individuals are custodians of change and positive behaviour in organisations, especially in the diverse South African context (Du Plessis & Barkhuizen, 2012).

4.7 CONCLUSION

The aim of this chapter was to consider the nature of positive PsyCap, its interaction with a psychological recession and the crucial role of organisational-level variables, such as HRM practices, in developing employees' PsyCap. PsyCap is located both in POS and POB. POS considers the composition of PsyCap and that PsyCap predominantly consists of four components, namely hope, self-efficacy, resilience and optimism. These four components interdependently provides individuals with the capacity to deal better with adversity such as an economic and psychological recession. Organisations also stand to benefit from developing PsyCap in employees due to the potential influence on performance, employee wellness and positive employee attitudes and behaviour.

South African HR practitioners, managers and organisations have a crucial role to play in the development of employees' PsyCap and should create caring workplaces that take cognisance of the broader socio-economic issues and psychological recession affecting employees and their performance.

In Chapter Five the questionnaire and the research design used for the study are discussed in detail.

CHAPTER 5: RESEARCH METHODOLOGY AND ANALYSIS OF BIOGRAPHICAL INFORMATION

5.1	INTRODUCTION	121
5.2	RESEARCH OBJECTIVES, HYPOTHESES AND DISCUSSION OF THEORETICAL MODEL	121
5.3	RESEARCH DESIGN	124
5.4	SAMPLING DESIGN.....	132
5.4.1	Step 1: Define the target population	133
5.4.2	Step 2: Determine the sampling frame.....	135
5.4.3	Step 3: Select a sampling technique.....	137
5.4.4	Step 4: Determine the sample size	140
5.4.5	Step 5: Execute the sampling process.....	142
5.5	DATA COLLECTION	142
5.5.1	Research instrument.....	143
5.5.2	Questionnaire structure and design	145
5.5.2.1	Section B: The Psychological Recession Scale	147
5.5.2.1.1	Section B1: Job insecurity, job loss and unemployment	148
5.5.2.1.2	Section B2: Work-family conflict	148
5.5.2.1.3	Section B3: Organisational change and psychological uncertainty	148
5.5.2.1.4	Section B4: Work-related tension and psychological distress...	149
5.5.2.2	Section C: Positive HRM practices	149
5.5.2.3	Section D: PsyCap Scale (PCQ-24)	151
5.5.3	Pilot study	151
5.5.4	Administration of the questionnaire.....	153
5.5.5	Response rate and analysis of biographical details	154
5.5.6	Proportionate representation of the target population	157

5.6	DATA ANALYSIS TECHNIQUES USED IN THIS STUDY.....	158
5.6.1	Descriptive statistical techniques	158
5.6.2	Inferential statistical techniques	158
5.6.3	Exploratory Factor Analysis (EFA).....	161
5.6.3.1	Section B: The Psychological Recession Scale.....	162
5.6.3.2	Section C: Positive HRM practices	167
5.6.3.3	Section D: PCQ-24	171
5.7	RELIABILITY AND VALIDITY	176
5.7.1	Reliability	176
5.7.2	Validity	179
5.7.2.1	The Job Insecurity Questionnaire (JIQ)	181
5.7.2.2	Work-family Conflict Scale.....	181
5.7.2.3	Organisational change and psychological uncertainty	181
5.7.2.4	Work Tension Scale.....	181
5.7.2.5	Positive HRM practices.....	182
5.7.2.6	Psychological Capital Questionnaire (PCQ-24)	182
5.8	ETHICAL CONSIDERATIONS	182
5.8.1	Voluntary participation (informed consent).....	183
5.8.2	Permission to conduct the study	183
5.8.3	Anonymity	183
5.8.4	Confidentiality	183
5.9	CONCLUSION	184

LIST OF TABLES

Table 5.1: Key differences between qualitative and quantitative research designs (Adapted from Neuman, 2011).	127
Table 5.2: Key differences between research design and research methodology (Adapted from Babbie and Mouton, 2001).....	127
Table 5.3: Total number of fixed PHC facilities per WRDM local sub-district.....	135

Table 5.4: Distribution of the target population: Total staff headcounts per core HRH category (N = 1 336).....	137
Table 5.5: Proportional stratified sampling per core HRH category	139
Table 5.6: A decision guideline for determining sample size (Adapted from Krejcie and Morgan, 1970).....	141
Table 5.7: Summary of the sample plan	142
Table 5.8: Summary of sample profile	155
Table 5.9: Frequency distribution of demographic variables of the sample (n=318).	156
Table 5.10: Proportionate representation of the target population	157
Table 5.11: Descriptive statistical techniques used in this study.....	160
Table 5.12: Initial eigenvalues of the Psychological Recession Scale	163
Table 5.13: Results of the EFA on the four-factor solution of the Psychological Recession Scale	164
Table 5.14: Results of the EFA on the Psychological Recession Scale excluding items B1.1, B3.3, B4.1, B4.2, B4.3 and B4.6.	166
Table 5.15: Initial eigenvalues of the positive HRM practices scale.....	167
Table 5.16: Results of the EFA on the five-factor solution of the positive HRM practices scale	168
Table 5.17: Results of the EFA on the positive HRM practices scale excluding items C2.4, C2.5, C5.8 and C5.9.	170
Table 5.18: Initial eigenvalues of the PCQ-24 during the first round of EFA	172
Table 5.19: Results of the first round of EFA on the PCQ-24	173
Table 5.20: Results of the EFA on the PCQ-24 excluding reversed items (D1.13, D1.20 and D1.23)	174
Table 5.21: Results of the EFA on the PCQ-24 two-factor solution excluding items D1.21 and D1.22	175
Table 5.22: Reliability of measuring scales and their subscales (n=318)....	178

LIST OF FIGURES

Figure 5.1: Conceptual model.....	123
Figure 5.2: Alignment between research objectives, sub-problems and hypotheses	129

Figure 5.3: The sampling design process (Adapted from Malhotra, 2010).. 133

Figure 5.4: Map of the West Rand District Municipality..... 134

CHAPTER 5: RESEARCH METHODOLOGY AND ANALYSIS OF BIOGRAPHICAL INFORMATION

5.1 INTRODUCTION

In Chapters Two, Three and Four, a literature review was presented to develop an understanding of the variables associated with a psychological recession, PsyCap and positive HRM practices.

In this chapter, the research design of the study as well as the measuring instruments, data collection method and methods of data analysis are described. In brief, the research was conducted in a positivistic paradigm, taking a quantitative approach by way of survey research. The research study was being conducted in a salutogenic paradigm focussing on the wellness of the employee and the organisation during a psychological recession. Salutogenesis refers to a study whereby the research question considers the various factors that support human health and well-being, rather than on factors that cause disease (Lindström & Eriksson, 2006).

The main purpose of this chapter is to explain the logic behind using the selected research methods for the present study. The procedures and processes discussed in the current chapter were meant to not only find an answer to the main problem, but also to address the sub-problems stated in Chapter One. An analysis of the biographical information pertaining to the respondents of the study is also presented and discussed.

5.2 RESEARCH OBJECTIVES, HYPOTHESES AND DISCUSSION OF THEORETICAL MODEL

As discussed in Chapter One, the empirical objectives of the present study were to investigate whether:

- South Africans were exposed to a psychological recession.
- A psychological recession negatively influences levels of PsyCap.
- HRM practices enhance employees' PsyCap.

- An optimal bundle of HRM practices that enhances employees' PsyCap can be identified.
- HRM practices serve as a buffer against negative experiences of a psychological recession.

Based on the above research objectives, five hypotheses have been formulated:

Hypothesis 1: South African employees experience the negative effects of a psychological recession.

Hypothesis 2: A psychological recession negatively influences employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.

Hypothesis 3: HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.

Hypothesis 4: A bundle of HRM practices that enhances PsyCap can be identified.

Hypothesis 5: HRM practices buffer experiences of the negative impact of a psychological recession.

Figure 5.1 depicts a conceptual model that integrates the main variables of the present study, while also depicting the relationships reflected in the above hypotheses. The figure demonstrates that experiences of a psychological recession (H1) has a negative impact on the development of employees' PsyCap (H2), as employees are faced with increasing job demands, inadequate salaries, job instability, insecurity and uncertainty (Antoniou & Cooper, 2013). The model further proposes that HRM practices enhance employees' PsyCap during a psychological recession (H3).

Lastly, the model proposes that the application of positive HRM practices buffer the negative outcomes associated with a psychological recession (H4). Statistical analyses were then adopted to determine whether a bundle of collective HRM practices could enhance the PsyCap of employees (H5).

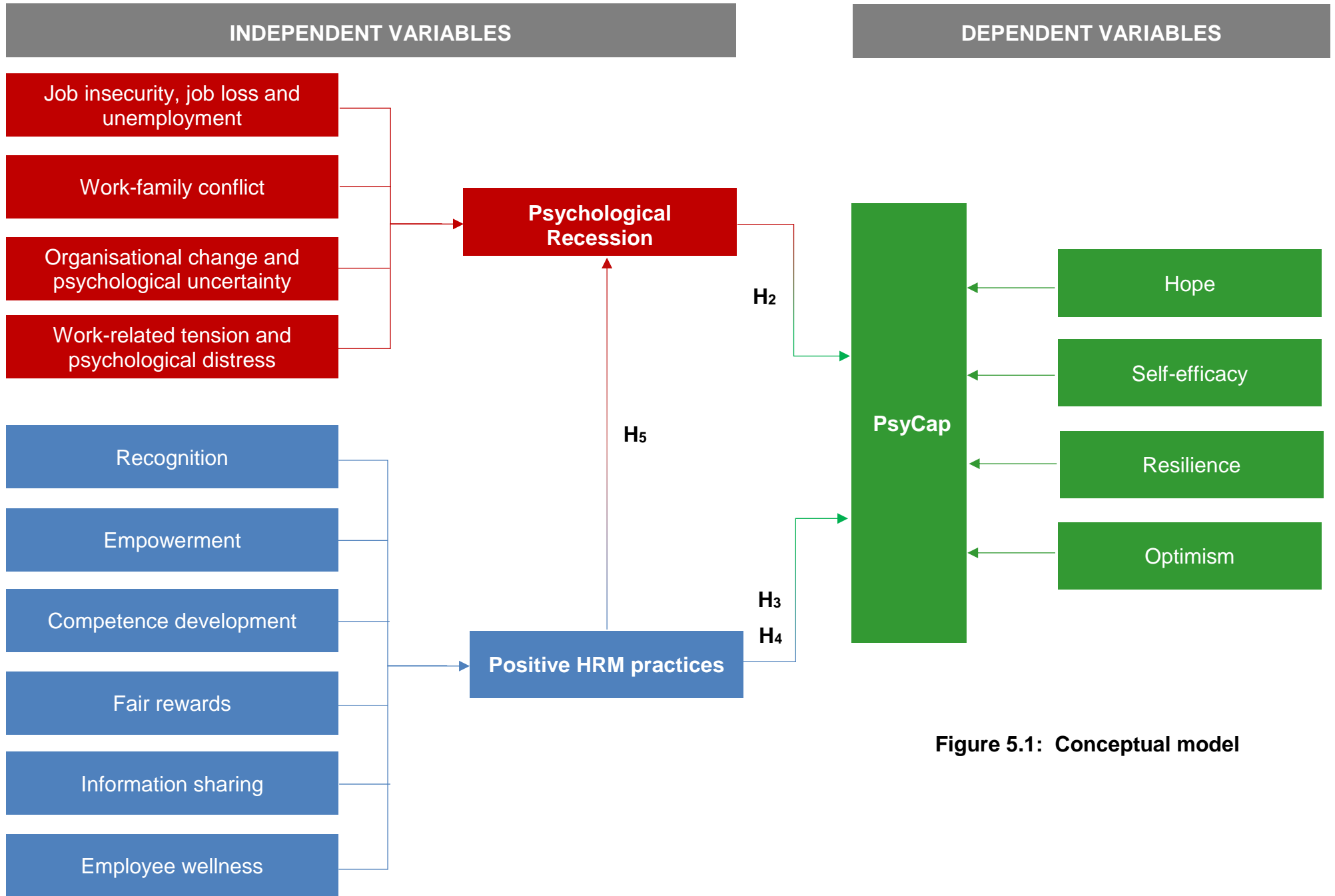


Figure 5.1: Conceptual model

5.3 RESEARCH DESIGN

Researchers often confuse terms such as **research**, **research design** and **methodology** and misunderstand how these concepts are related to each other (Denscombe, 2007). Therefore, before describing in more detail the research methodology that was followed in the present study, these three concepts will be differentiated.

Research has been defined in different ways by different authors, as indicated here. Bhattacharjee (2012) defines research as a systematic approach towards purposeful investigation. In a more detailed definition, Webster's 20th Century Dictionary (1983) defines research as studious examination aimed at discovering new facts and their correct interpretation, the revision of accepted conclusions, theories or laws in the light of newly discovered facts, and the practical applications of such new or revised conclusions, theories or laws (Webster & Mckechnie, 1983).

Neuman (2011) defines research as the advancement of fundamental knowledge about the social world as it focuses on refuting or supporting theories that explain how the social world operates, what makes things happen, why social relations are a certain way and why society changes.

Research can serve many purposes. According to Neuman (2011), the purposes of research may be organised into three groups based on what the researcher is trying to accomplish:

- **Exploration** in which the primary purpose is to examine a little understood issue or phenomenon and move toward refined research questions. This is also referred to as exploratory research.
- **Description** in which the researcher is presenting a picture of the specific details of a situation, social setting, or relationship. This is also referred to as descriptive research.
- **Explanation** in which the primary purpose is to explain why events occur and to build, elaborate, extend, or test theory. This desire to know "why", to explain, is the purpose of explanatory research.

In this study, the researcher used the **exploratory, descriptive and explanatory method**. The **exploratory method** was used to gain a better understanding of a psychological recession, as current available research in this area was lacking.

According to Kowalczyk (n.d.) exploratory research seeks to formulate new topics and angles. The present study, for example, provided a new angle on the nature of a psychological recession, employees' experiences related to a psychological recession and the influence of bundles of HRM practices on employees' PsyCap by empirically measuring it in a new manner. In exploratory research, the researcher enters the research field with curiosity and provides new theoretical and empirical data (Burns & Grove, 2003).

With regard to the **descriptive method**, the researcher described the characteristics of the population based on data collected from the samples. The researcher also used descriptive methods to define the target group's experiences in terms of a psychological recession and HRM practices, as well as the level of their PsyCap.

According to Neuman (2011), explanatory studies are usually characterised by hypotheses that indicate the nature and direction of the relationships between the variables being studied. In the present study, the researcher used the **explanatory method** by formulating various research hypotheses that specified the relationships between the dependent and independent variables, as depicted in Figure 5.1. Inferential statistics were used to approve or refute these hypotheses and indicate relationships among the variables.

Babbie (2008) states that research may take one of two possible forms: inductive or deductive. In the deductive model research is used to test theories. The goal of the researcher is therefore to test various concepts and patterns known from theory, by using new empirical data (Bhattacharjee, 2012). Regarding the inductive model, theories are developed from the analysis of research data (Babbie, 2008).

Inductive research is therefore also referred to as theory-building research, where deductive research is often denoted as theory-testing research (Bhattacharjee, 2012). Given the foregoing, the present study should contribute to both theory building (inductive research) and theory testing (deductive research). For example, the pre-reading to this study revealed that current available research did not provide for an adequate understanding of a psychological recession and that empirical research in this area was also lacking. Gupta (2013) further states that there has been no systematic study of the impact of various HRM practices on employees' PsyCap (Gupta, 2013). In both respects, this study was aimed at filling the gaps.

Where research refers to a systematic and scientific search for relevant information on a specific topic, "research design" and "research methodology" describe other dimensions of research. Research design is explained first. Malhotra (2007) defines **research design** as a blueprint detailing the various strategies and procedures that are employed to answer the research questions and test specific hypotheses.

Research design refers to the types of inquiry within qualitative and quantitative approaches, and provides a researcher with direction to navigate through the various processes in a research design (Creswell, 2013). According to Bhattacharjee (2012), these processes include the data collection process, development of the measuring instrument and sampling method. These processes are discussed in the following sections. In a **qualitative research** design the researcher aims to discover and understand the perspectives, thoughts and personal experiences of respondents (Babbie & Mouton, 2001; Harwell, 2011). Examples of qualitative data collection methods include participant observations, semi-structured and unstructured observations, focused interviews, in-depth interviews, oral/life histories, focus groups/group interviews and content analysis of documents (Blaikie, 2009).

Quantitative research, on the other hand, is an attempt to increase the objectivity, generalisability and replicability of research findings (Harwell, 2011).

In quantitative research studies data is collected in numbers and are subsequently analysed and reported in the same form (Blaikie, 2009). Where the quantitative design is concerned with counting and measuring aspects of social life, the qualitative research design focuses more on producing broad descriptions and exploring participants' interpretations (Blaikie, 2009). Examples of quantitative data collection methods include questionnaires and structured interviews (Blaikie, 2009). Table 5.1 provides a summary of the key differences between qualitative and quantitative research designs.

Table 5.1: Key differences between qualitative and quantitative research designs (Adapted from Neuman, 2011).

QUANTITATIVE RESEARCH DESIGN	QUALITATIVE RESEARCH DESIGN
Measure objective facts	Construct social reality, cultural meaning
Focus on variables	Focus on interactive processes and events
Reliability is key	Authenticity is key
Value free	Values are present and explicit
Theory and data are separate	Theory and data are fused
Independent of context	Situationally constrained
Many cases and subjects	Few cases and subjects
Statistical analysis	Thematic analysis
Researcher is detached	Researcher is involved

Research methodology, on the other hand, considers and explains the logic behind the research methods and techniques that are implemented (Babbie, Mouton, Vorster & Prozesky, 2006). The differences between research design and research methodology are outlined in Table 5.2.

Table 5.2: Key differences between research design and research methodology (Adapted from Babbie and Mouton, 2001).

RESEARCH DESIGN	RESEARCH METHODOLOGY
Focuses on the logic of research: What kind of evidence is required to address the research question adequately?	Focuses on the individual steps in the research process and the most unbiased procedures to be employed.
Point of departure: Research problem or question.	Point of departure: Specific tasks (data collection or sampling) at hand.
Focuses on the end product: What kind of study is being planned and what kind of results are being aimed at.	Focuses on the research process and the kind of tools and procedures to be used.

It is evident that research design refers to a cognitive planning process and research methodology to the practical execution of research tasks based on the design. Time also plays a crucial role in the design and execution of a research study (Babbie, 2015). According to Babbie (2015), researchers have two principal options available to confront the issue of time:

- **Cross-sectional studies:** Research studies based on observations representing a single point in time.
- **Longitudinal studies:** A study design involving the collection of data at different points in time.

This study takes place at a specific point in time when South Africa is, as described in Chapter One and Two, exposed to enduring economic challenges, which are influencing people's coping abilities. Furthermore, a cross-sectional study was relevant to the study as the purpose was to measure PsyCap under specific conditions, which in this case was during a psychological recession. Limitations of a cross-sectional study were addressed by targeting a large population and taking effort to obtain a high as possible response rate.

Based on the above definitions of research and the fact that the choice of research depends on the type of study and the nature of the research problems, a cross-sectional, quantitative study design was used for the purpose of the present study. The quantitative study took place in a positivistic paradigm, whereby the data was derived from measurement of the constructs and realities were established by analysing the data (Krauss, 2005), which forms the foundation of knowledge. The current design was based on the identification of the main problem, seven theoretical sub-problems, and five empirical sub-problems. Figure 5.2 provides a visual representation of the alignment between the main problem, research objectives, theoretical and empirical sub-problems and hypotheses.

The main problem, as stated in Chapter One, was:

Which HRM practices will best contribute to the development of PsyCap in employees during a psychological recession?

MAIN PROBLEM <i>Which HRM practices will best contribute to the development of PsyCap in employees during a psychological recession?</i>		
RESEARCH OBJECTIVES	ALIGNMENT WITH THEORETICAL AND EMPIRICAL SUB-PROBLEMS	HYPOTHESES
Investigate whether South Africans are exposed to a psychological recession.	How has South Africa been affected by the worldwide economic crisis and what are the associated social issues, which could contribute towards a psychological recession among South Africans? (Theoretical sub-problem one)	H ₁ : South African employees experience the negative effects of a psychological recession.
	What is the nature of a psychological recession and to what extent do South Africans experience a psychological recession? (Theoretical sub-problem two)	
	To what extent is the target group experiencing the negative consequences associated with a psychological recession? (Empirical sub-problem one)	
Investigate whether a psychological recession negatively influences levels of PsyCap.	What are the negative consequences of a psychological recession for the economy, organisations and the individual? (Theoretical sub-problem three)	H ₂ : A psychological recession negatively influences employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.
	What is the impact of a psychological recession on the target groups' PsyCap, and specifically their hope, self-efficacy, resilience, and optimism? (Empirical sub-problem two)	
Investigate whether HRM practices enhance employees' PsyCap. Investigate whether an optimal bundle of HRM practices that enhances employees' PsyCap can be identified.	What are the main components of PsyCap and how can organisations develop PsyCap? (Theoretical sub-problem four)	H ₃ : HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism. H ₄ : A bundle of HRM practices that enhances PsyCap can be identified.
	Is there a relationship between HRM practices and the development of PsyCap? (Theoretical sub-problem five)	
	How can specific HR strategies or interventions contribute towards the development of employees' PsyCap? (Theoretical sub-problem six)	
	To what extent do selected HRM practices foster the development of the target groups' PsyCap? (Empirical sub-problem three)	
	Which bundle of HRM practices positively influences the development of the target groups' PsyCap during a psychological recession? (Empirical sub-problem four)	
Investigate whether HRM practices serve as a buffer against negative experiences of a psychological recession.	Which bundle of HRM practices is most effective in buffering the negative impact of a psychological recession? (Theoretical sub-problem seven)	H ₅ : HRM practices buffer experiences of the negative impact of a psychological recession.
	Do HRM practices buffer negative experiences of a psychological recession? (Empirical sub-problem five)	

Figure 5.2: Alignment between research objectives, sub-problems and hypotheses

In an attempt to develop a manageable and suitable strategy to address the main problem, the following theoretical and empirical sub-problems were identified.

Theoretical sub-problems

1. How has South Africa been affected by the worldwide economic crisis and what are the associated social issues, which could contribute towards a psychological recession among South Africans?
2. What is the nature of a psychological recession and to what extent do South Africans experience a psychological recession?
3. What are the negative consequences of a psychological recession for the economy, organisations and the individual?
4. What are the main components of PsyCap and how can organisations develop PsyCap?
5. Is there a relationship between HRM practices and the development of PsyCap?
6. How can specific HR strategies or interventions contribute towards the development of employees' PsyCap?
7. Which bundle of HRM practices is most effective in buffering the negative impact of a psychological recession?

The following procedures were employed to address the **theoretical sub-problems**:

1. To resolve **sub-problem one and two**, a literature survey was conducted, as presented in Chapter Two, which focused on socio-economic issues that contributed towards a psychological recession in South Africa. In Chapter Three, the underlying theoretical constructs of a psychological recession were delineated. This delineation of a psychological recession addressed sub-problem two.
2. To solve the **third sub-problem**, literature was surveyed to examine the consequences of a psychological recession for the economy, organisations, and individuals. From the literature surveyed, as synthesised in Chapter Three, it became clear that a psychological recession was evident during

the period the study was conducted with negative consequences for individuals, organisations and in the larger economy.

3. To resolve **sub-problems four, five and six**, literature was surveyed and presented in Chapter Four that investigated the nature and components of PsyCap. The relationship between positive HRM practices and PsyCap was also highlighted in Chapter Four. Lastly, focus was placed on specific bundles of HRM practices that enable PsyCap to flourish and develop.
4. To solve **sub-problem seven**, a literature survey was conducted to determine the role of organisational-level variables, such as positive HRM practices, in buffering the negative impact of a psychological recession on organisational members. From the literature surveyed and presented in Chapter Three, it became evident that previous empirical studies support the notion that HRM practices have the potential to empower, re-engage and retain employees during a psychological recession.

The empirical sub-problems identified in line with the main research problem are presented here:

Empirical sub-problems

1. To what extent is the target group experiencing the negative consequences associated with a psychological recession, including job insecurity, job loss and unemployment, organisational change and psychological uncertainty, work-family conflict, and work-related tension and psychological distress?
2. What is the impact of a psychological recession on the target groups' PsyCap, and specifically their hope, self-efficacy, resilience, and optimism?
3. To what extent do selected HRM practices foster the development of the target groups' PsyCap?
4. Which bundle of HRM practices positively influences the development of the target groups' PsyCap during a psychological recession?
5. Do HRM practices buffer negative experiences of a psychological recession?

The following procedures were employed to address the **empirical sub-problems**:

1. To resolve **sub-problem one**, a survey with a questionnaire as data collection tool was conducted. Section B of the questionnaire addressed this sub-problem as it measured the extent to which employees have experienced the negative consequences of a psychological recession. The results were analysed by means of descriptive and inferential statistical analysis.
2. To solve the **second empirical sub-problem**, Section D of the questionnaire measured respondents' overall level of PsyCap, as well as the four PsyCap dimensions (i.e. hope, self-efficacy, resilience and optimism). Inferential statistical analysis was employed to determine the nature, strength and direction of the relationship between respondents' experiences of a psychological recession (Section C of the questionnaire) and PsyCap (Section D of the questionnaire).
3. **Sub-problem three and four** were addressed through Section C and D of the questionnaire. Inferential statistics were used to determine the influence of various positive HRM practices (Section C) on employees' PsyCap (Section D). Furthermore, inferential statistical analysis revealed which HRM practices contributed the most towards the development of respondents' PsyCap.
4. **Sub-problem five** was addressed in Section B and D of the questionnaire. Inferential statistical analysis was used to measure the influence of the six positive HRM practices (Section C) on the negative experiences of a psychological recession (Section B).

In the next section, the research procedures used in the empirical study are outlined.

5.4 SAMPLING DESIGN

According to Malhotra (2007), the sampling design process includes five steps that are shown sequentially in Figure 5.3. It is important to note that these steps are closely interrelated and relevant to all aspects of the current research project, from problem definition in Chapter One to the presentation of the results and findings in Chapter Six. Each step of the sampling design process is discussed in the following sections.

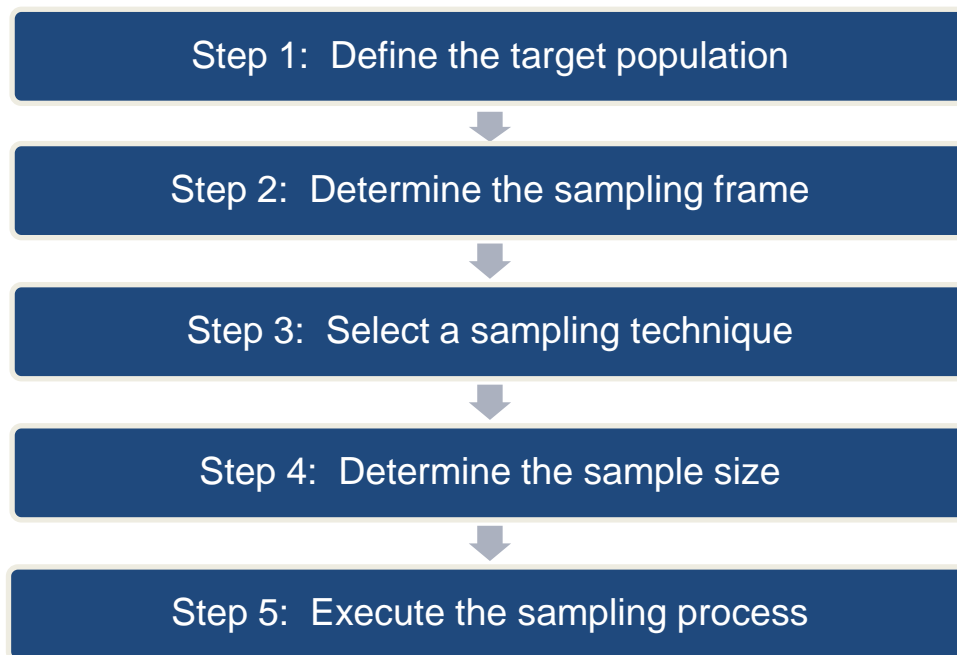


Figure 5.3: The sampling design process (Adapted from Malhotra, 2007)

5.4.1 Step 1: Define the target population

In the social sciences it is not feasible to collect data from an entire target population, due to limited resources such as trained fieldworkers, transport, finances and time (Singh, 2007). For this reason, researchers need to first identify the target population and secondly, select a sample that is representative of the population. A representative sample implies that the sample has the exact properties as the target population from which it was drawn (Welman, Kruger & Mitchell, 2005).

It is important to draw a distinction between the target population and the sample. According to David and Sutton (2004), the target population refers to the entire set of individuals to which the findings of the survey are to be generalised. Malhotra (2007) defines the target population as the collection of elements or objects that possess the information sought by the researcher and about which inferences are to be made. Sampling, on the other hand, refers to the process of selecting units (for example, people and organisations) from the target population (David & Sutton, 2004). In other words, the target population does not refer to everyone in general, but rather to everyone in a group that a researcher claims to be researching.

The target population of this study consisted of all permanent and contract clinical and support staff who were employed at 43 fixed PHC clinics situated within the West Rand District Municipality (WRDM). A fixed PHC clinic refers to a healthcare facility that provides eight to 24 hour service per day for five or more days per week (National Department of Health, 2015). Figure 5.4 shows a map of the WRDM and its four local sub-districts namely Mogale City, Merafong City, Randfontein and Westonaria. The WRDM is located on the South Western edge of the Gauteng Province of South Africa and is 4 095 km² size of the land cover, with a population size of 848 597. Towns in the region include Krugersdorp, Randfontein, Westonaria and Carletonville (West Rand District Municipality, 2013).

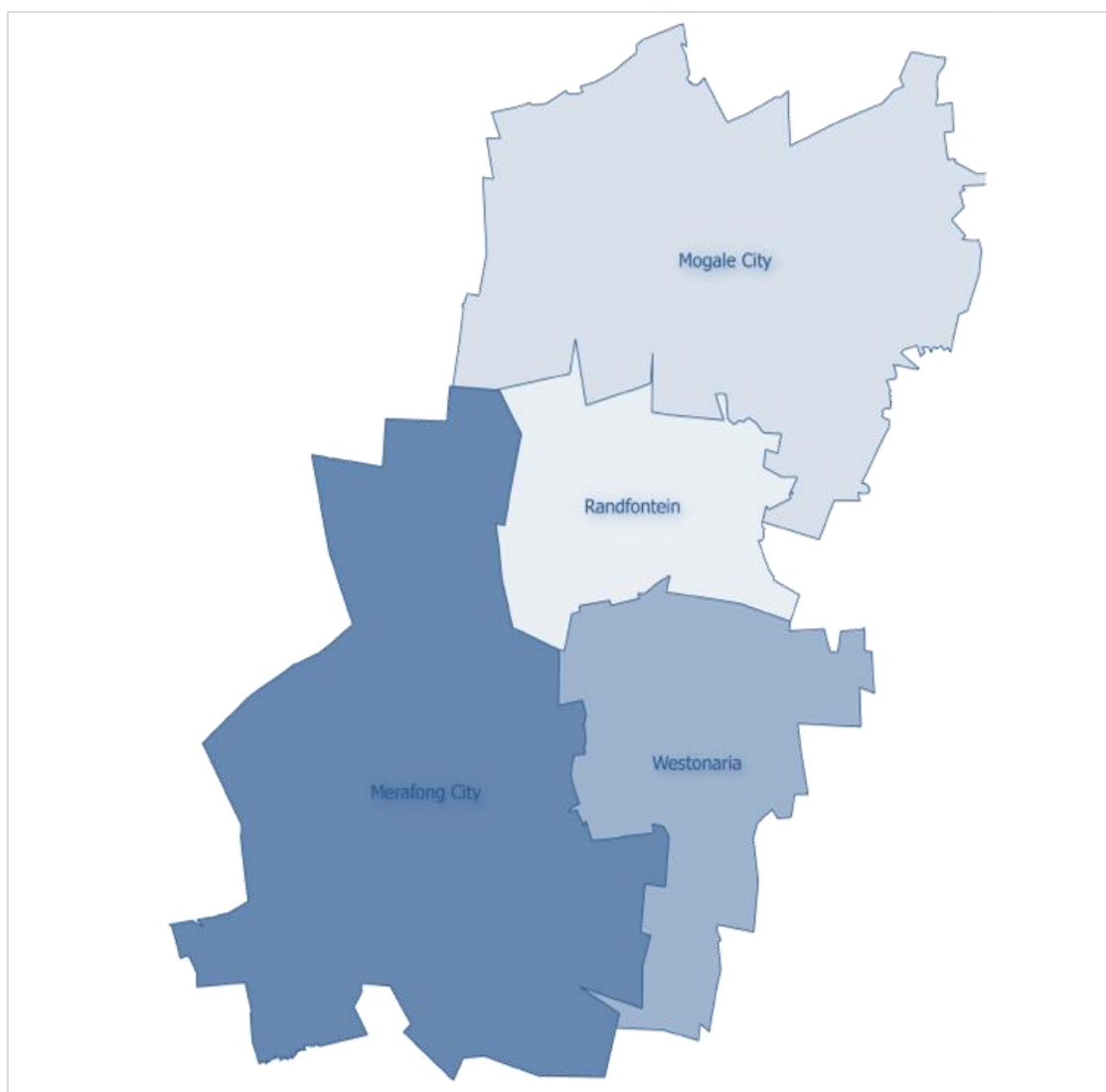


Figure 5.4: Map of the West Rand District Municipality

A total number of 43 fixed PHC clinics are located within the WRDM and managed by the West Rand District Department of Health. Table 5.3 provides a breakdown of the number of fixed PHC clinics located within each local sub-district. These figures were obtained from the West Rand Health District HR Manager.

Table 5.3: Total number of fixed PHC facilities per WRDM local sub-district

LOCAL SUB-DISTRICT	NUMBER FIXED PHC CLINICS
Mogale City	16
Merafong City	11
Randfontein	7
Westonaria	9
Total	43

Since a population is an abstract concept (Neuman, 2011), the researcher needed to estimate the target population by developing the sampling frame. The identification of the sampling frame allowed the researcher to find out how many items were contained in the target population. This process is discussed in the following section.

5.4.2 Step 2: Determine the sampling frame

Malhotra (2007) defines a sampling frame as a representation of the sampling elements of the target population. A sampling element refers to the unit of analysis or case in a population. The unit of analysis is the major entity that is being analysed in a study (Babbie, 2010). In social science research, typical units of analysis include individuals, groups, social organisations and social artefacts (Babbie, 2010). Concerning the present study, employees were the unit of analysis.

According to Proctor (2005), difficulty may arise in obtaining accurate, current and representative sampling frames and consequently no sampling frame is perfect.

The sampling frame error should therefore be taken into consideration as this error occurs when specific sample elements are excluded in the sampling frame, or when the sampling frame is not an accurate representation of the target population (Malhotra, 2007).

To ensure that the sampling frame accurately represented the target population, the researcher consulted the National Department of Health's *Implementation Guideline of the Health Workforce Normative Guides and Standards for Fixed Primary Health Care Facilities* (National Department of Health, 2015). This guideline assisted the researcher in identifying the specific occupational categories to include in the sampling frame. According to the guideline, a minimum of ten core human resources for health (HRH) categories should be employed at a fixed PHC clinic to effectively deliver the expected services at the facility. These ten core HRH categories include the following (National Department of Health, 2015):

- Facility operational manager
- Professional nurse/clinical nurse practitioners (CNP)
- Enrolled nurses
- Cleaners
- Lay counsellors
- Admin clerk/data capturers
- Groundsman
- Security
- Pharmacy assistants

After careful consideration and consultation with the West Rand Health District HR Manager, it was decided to exclude cleaners, groundsman and security staff from the sampling frame, as these HRH categories would have experienced difficulty interpreting and completing a scientifically compiled questionnaire, due to low literacy levels.

Furthermore, the majority of security staff and cleaners were employed by external organisations and did not form part of the West Rand District Department of Health's staff establishment.

The West Rand District Department of Health's HR department supplied the researcher with staff lists and total staff headcounts per core HRH category. Table 5.4 provides a breakdown of the total staff headcounts per core HRH category that were employed at all 43 fixed PHC clinics located within the WRDM. These figures were obtained prior to the data collection phase. Based on Table 5.4, the target population for the present study totalled 1 336 respondents.

Table 5.4: Distribution of the target population: Total staff headcounts per core HRH category (N = 1 336)

Core HRH category	Total staff headcount	Percentage (%)
Facility operational managers	90	7%
Professional nurses/CNP	430	32%
Enrolled nurses	239	18%
Lay counsellors	295	22%
Admin clerks/data capturers	264	20%
Pharmacy assistants	18	1%
Total (Target population)	1 336	100%

5.4.3 Step 3: Select a sampling technique

Having identified and defined the target population from which the sample was drawn, the next step was to decide how the sample itself would be selected. Singh (2007) defines sampling as a process of selecting sampling units from the population to ensure that the sample accurately reflects the population.

According to Bryman and Bell (2007), there are two main approaches to sampling in social research: nonprobability and probability sampling. With regard to nonprobability sampling, the probability of any particular member of the population being chosen is unknown, and respondents are not selected based on the researcher's personal judgement (Struwig & Stead, 2013).

Essentially, non-probability sampling implies that some units in the population are more likely to be selected than others (Bryman & Bell, 2007; Neuman, 2011). According to Struwig and Stead (2013), the types of nonprobability sampling include the following:

- **Convenience sampling** refers to a sample that is chosen based on availability. Respondents are selected because they are cooperative and easily accessible.
- **Purposive or judgement sampling** is performed by individuals who are specialists in the subject of the survey. The selection of respondents depends on the researcher's judgment.
- **Quota sampling** refers to a sample that is selected according to a specific criterion. To be included in the sample, each respondent has to comply with specific requirements.
- **Snowball sampling** is performed when a researcher selects additional respondents by using information from his or her initial respondents.

Regarding probability sampling, each member of the population has a known non-zero probability of being selected (Neuman, 2011). Methods of probability sampling include the following (Struwig & Stead, 2013):

- **Simple random sampling** is performed when a researcher assigns each member of the sampling frame a number and then selects the sample units by a random method. Herek (2009) states that random sampling is the purest form of probability sampling.
- **Stratified random sampling** is performed when a researcher divides the population into sub-populations (strata) and then randomly draws a sample from each sub-population.
- **Cluster sampling** is executed when a researcher divides the items in the universe into groups and then selects any number of these groups at random.
- **Multi-stage sampling** involves two or more steps that combine some of the probability sampling techniques.
- **Systematic sampling** refers to a procedure where a random process selects the initial point and then every n th number on the list is selected from there onwards.

Concerning the present study, stratified random sampling was selected as the appropriate sampling technique, as the target population was stratified according to the six core HRH categories that were employed at a fixed PHC facility. These were, namely facility operational managers, professional nurses/CNPs, enrolled nurses, lay counsellors, admin clerks/data capturers, and pharmacy assistants. A random sample was then selected from each HRH category (stratum). The specific technique of stratified sampling used in this study was proportionate sampling, where the sample size of each core HRH category (stratum) was proportionate to the population size of the stratum. Because there were greater differences between the strata in terms of the number of employees located within each stratum (see Table 5.4), the proportional stratified random sampling method was appropriate. Respondents from the six strata were chosen by using the following equation: (StatTrek, 2017):

$$n_h = (N_h \div N) \times n$$

Where n_h is the sample size for stratum h , N_h is the population size for stratum h , N is total population size, and n is the recommended sample size (StatTrek, 2017). The calculation of the recommended sample size is discussed in further detail in section 5.4.4. Table 5.5 indicates the method of proportional stratified sampling that was used to select the ideal number of participants per stratum to participate in the study.

Table 5.5: Proportional stratified sampling per core HRH category

Core HRH Categories (Strata)	Population Size (Stratum) (N_h)	Sample Size (Stratum) (n_h)	Calculation
Facility operational managers	90	20	$(90 \div 1336) \times 300$
Professional nurses/CNP	430	97	$(430 \div 1336) \times 300$
Enrolled nurses	239	54	$(239 \div 1336) \times 300$
Lay counsellors	295	66	$(295 \div 1336) \times 300$
Admin clerks/data capturers	264	59	$(264 \div 1336) \times 300$
Pharmacy assistants	18	4	$(18 \div 1336) \times 300$
Total	1 336	300	

This technique ensured that members of the target population were not significantly under- or overrepresented (Collis & Hussey, 2009). In stratified random sampling, the researcher controls the relative size of each stratum, rather than allowing random processes to control it (Neuman, 2011). Stratified random sampling therefore produces samples that are more representative of the population than simple random sampling (Neuman, 2011).

5.4.4 Step 4: Determine the sample size

A large enough sample is required to properly address the research questions and enable the researcher to perform important statistical tests (Collis & Hussey, 2009). Furthermore, a well-selected sampling method will enable the researcher to generalise results to the population (Collis & Hussey, 2009; Neuman, 2011). According to research literature, sample sizes of up to a minimum of 100 can be regarded as statistically significant (Potgieter, 2009). Factor analysis also requires a minimum of 100 responses to be effective (Potgieter, 2009). According to De Vos, Strydom, Fouche and Delpont (2002), a minimum sample size of 30 cases is sufficient for statistical procedures. Sekaran (2003), who contends that researchers should apply the rule of thumb regarding sample sizes that range between 30 and 500 cases, supports this. In other words, the researcher should make a decision about the adequacy of the sample size used for the study.

Concerning multivariate statistical procedures, Harris (2012) states that five respondents per item are required to conduct Structural Equation Modelling (SEM) and Confirmatory Factor Analysis (CFA). Babbie (2010) supports this by stating that a large number of cases are required for both descriptive and explanatory studies, especially when several variables are to be analysed simultaneously.

The ever-increasing need for a representative statistical sample in empirical research has created the demand for an effective method of determining sample size (Kenya Projects Organisation, 2012). To address this gap, Krejcie and Morgan (1970) developed a guideline for determining recommended sample sizes for a given population. This guideline is reflected in Table 5.6.

Table 5.6: A decision guideline for determining sample size (Adapted from Krejcie and Morgan, 1970).

N	n	N	n	N	n
10	10	220	140	1 200	291
15	14	230	144	1 300	297
20	19	240	148	1 400	302
25	24	250	152	1 500	306
30	28	260	155	1 600	310
35	32	270	159	1 700	313
40	36	280	162	1 800	317
45	40	290	165	1 900	320
50	44	300	169	2 000	322
55	48	320	175	2 200	327
60	52	340	181	2 400	331
65	56	360	186	2 600	335
70	59	380	191	2 800	338
75	63	400	198	3 000	341
80	66	420	201	2 500	346
85	70	440	205	4 000	351
90	73	460	210	4 500	354
95	76	480	214	5 000	357
100	80	500	217	6 000	361
110	86	550	226	7 000	364
120	92	600	234	8 000	367
130	97	650	242	9 000	368
140	103	700	248	10 000	370
150	108	750	254	15 000	375
160	113	800	260	20 000	377
170	118	850	265	30 000	379
180	123	900	269	40 000	380
190	127	950	274	50 000	381
200	132	1000	278	75 000	382
210	136	1100	285	100 000	384

Note:
N = Population Size; n = Sample Size

As can be seen from Table 5.6, the sample size increases at a diminishing rate as the population increases, and remains relatively constant at slightly more than 380 cases (Krejcie & Morgan, 1970). By using the recommended sample sizes listed in Krejcie and Morgan's (1970) decision guideline, a representative sample size of at least **300** respondents was aimed for in the present study, based on a total population of **1 336** respondents.

5.4.5 Step 5: Execute the sampling process

To execute the sampling process a detailed specification of the sampling process model was discussed in the previous sections. This included a description of the target population, sampling frame, sampling technique and sample size. Table 5.7 presents a summary of the sample plan of this study.

Table 5.7: Summary of the sample plan

SAMPLE PLAN	
Target population	All permanent and contract clinical and support staff who were employed at 43 fixed PHC clinics situated within the West Rand District Municipality (WRDM).
Sampling frame	Employees belonging to specific occupational groups (i.e. core HRH categories) which were required to deliver the expected services at a fixed PHC clinic. Headcounts and staff lists per occupational group were obtained from the HR department.
Sampling method	Probability sampling, stratified random sampling
Recommended sample size	300 respondents

The data collection procedures followed in this study are discussed in the following section.

5.5 DATA COLLECTION

In any research study it is imperative that the data collection and analysis procedures are managed with care and integrity, to guarantee a reliable research process (Neuman, 2011). The research instrument, questionnaire structure and design, administration of the questionnaire and response rate are explained in the following sections.

5.5.1 Research instrument

According to Struwig and Stead (2013) primary data collection methods for quantitative studies include the following:

- **Interviews:** Structured interviews or semi-structured interviews are usually used for quantitative research studies.
- **Questionnaire surveys:** Surveys utilising questionnaires include personal surveys, mail surveys and telephone surveys.

In this research study, the researcher used a self-administered questionnaire for the purpose of data collection (refer to Annexure A). Polit and Beck (2004) define a self-administered questionnaire as an instrument for gathering self-report information from the sample through the self-administration of questions in either a paper-and-pencil or online format. According to Bickman and Rog (1998) self-administered questionnaires are different from interviews because of the distance between the researcher and the respondent. During surveys, the researcher does not connect personally with the respondent and the respondent does not get an opportunity to engage with the researcher. Babbie (2010) summarises the advantages of self-administered questionnaires as follows:

- Self-administered questionnaires are generally cheaper and quicker to collect data.
- As respondents are sometimes reluctant to report controversial or deviant attitudes and behaviour during an interview, self-administered questionnaires may be more effective for collecting data on sensitive issues.
- Self-administered questionnaires make large samples feasible and are useful in describing the characteristics of a larger population.
- Standardised questionnaires have the ability to measure ambiguous and complex concepts.

For this study, a survey method was adopted with a self-administered questionnaire as data collecting instrument. The nature of this study made it more logical to use a self-administered survey. A psychological recession is a widespread phenomenon and HRM practices, which could potentially buffer the effect of a psychological recession by enhancing the PsyCap of employees, are

normally aimed at large numbers of employees. A survey enables the researcher to reach large numbers of employees located in different geographical regions without having to be physically present. In addition, the researcher identified existing scales that have previously been used to measure concepts related to this study.

Questionnaires, however, also have several weaknesses. According to Struwig and Stead (2013), common problems associated with questionnaires include the following:

- Low response rates, often ranging between 15% and 25%.
- The respondent might not have an interest in the topic.
- The intended respondent might not receive the questionnaire and someone else might complete it. For this reason, the correct biographical details of the respondents should be elicited through the questionnaire.
- Respondents might not understand some of the questions.
- Respondents do not know how to complete the questionnaire.

To manage the above problems, the researcher included a detailed cover letter (Annexure B) that was signed by the West Rand Health District HR Manager. This letter also demonstrated the district management's commitment to the research study. Instructions for completing the questionnaire were made as clear as possible, and an expert in the field of human resources management and organisational behaviour was asked to verify that the statements would be understandable to the target population. In addition, a pilot study was undertaken to proactively identify problems related to the formulation of the statements.

The researcher therefore attempted to capitalise on the advantages of using a self-administered questionnaire as data collection method, while managing the risks associated with the use of survey questionnaires. The data collection method chosen for this study enabled the researcher to achieve the purpose and objectives of the study. The structure and contents of the cover letter are discussed in the next section.

5.5.2 Questionnaire structure and design

According to Babbie (2015) researchers should follow specific guidelines when using questionnaires as a tool in survey research, as the format of a questionnaire can influence the quality of data collected. A clear format will ensure that respondents answer all the questionnaire items (Babbie, 2015).

Although questionnaire design is considered more of an art than a science, Struwig and Stead (2013) state that questionnaires should:

- Contain clear instructions on how to answer the questions.
- Be logically divided into different subject sections.
- Start with questions that are easy to answer.
- Avoid subject-related or technical jargon.
- Include short questions to avoid respondent fatigue.
- Be consistent and follow a systematic layout with sufficient space between questions and answers.

The above principles and guidelines provided the basis for the design of the questionnaire in this study to ensure data reliability. Two basic question formats are used in survey research, namely open- and closed-ended questions. Regarding open-ended questions, respondents are allowed to answer in their own words and express any ideas they think may apply. No alternatives or choices are offered (Struwig & Stead, 2013). Closed-ended questions, on the other hand, do not offer the possibility to specify answers by text description (Survio, 2013). According to Struwig and Stead (2013), there are four different types of closed-ended questions:

- **Multiple-choice questions** provide respondents with the option to select only one of several answers.
- **Checklists** provide respondents with a number of options from which to choose. The respondent selects one option from the list, or check all appropriate options.
- **Dichotomous questions** are multiple-choice questions with only two possible answers to a question, such as a “yes” and a “no”.
- **Scaled-response questions** are often used to gather data on attitudes and perceptions. Two examples are the Likert-type scale and the semantic

differential scale. Likert-type scales are usually linked to a number of statements that measure respondents' perceptions and attitudes on either a five-point or a seven-point scale.

- **Ranking questions** allow respondents to rank a list of items from the most to the least important.

Concerning the present study, closed-ended questions and a Likert-type rating scale with an unequal 1 to 5 agreement format were used. Another important guideline to questionnaire design is the cover letter, as it is the first point of contact that respondents have with the survey and questionnaire. According to Sarantakos (2005) the aim of a questionnaire cover letter is to introduce to respondents the research topic and researcher, neutralise any doubt or mistrust respondents might have about the study and motivate them to participate in the research study. The content of the cover letter should include the following aspects (Sarantakos, 2005):

- Identify the research team and its sponsors.
- Describe the study objectives and significance of the study.
- Provide reasons why the respondent should complete the questionnaire.
- Guarantee anonymity, privacy and confidentiality.
- Outline the requirements for completion.
- Provide respondents with information about possible risks associated with the study.
- Cover issues related to research ethics.

The suggestions and guidelines mentioned above were considered in the design of the cover letter. A cover letter that explained the purpose of the study, as well as endorsement specifying the organisation's support for the study, was included with the research questionnaire and distributed to the target group. The cover letter also assured respondents of confidentiality and anonymity, the amount of time that it would take to complete the online questionnaire, and contact details of the HR Department should any of the respondents have queries about the study. Refer to Annexure B for a copy of the questionnaire cover letter.

To measure the variables of interest, the researcher designed a composite questionnaire based on validated measures used in previous studies. The questionnaire was structured according to the following sections:

- **Section A** that required respondents to record demographical and biographical information such as gender, age, ethnicity, nature of employment and marital status. Respondents also had to specify their relevant HRH category (i.e. facility operational manager, professional nurse/clinical nurse practitioner, enrolled nurses, lay counsellor, admin clerk/data capturer and pharmacy assistant). The selection of biographical information was made in cognizance of the nature of the study, which focuses on a psychological recession, levels of PsyCap, and the influence of HRM Practices on PsyCap.
- **Section B** comprised questions that measured each of the four theoretical components of a psychological recession. Each component was measured under a separate subscale.
- **Section C** of the questionnaire comprised questions related to respondents' perceptions of the presence and application of positive HRM practices in their organisation. Each HRM practice was measured under a separate subscale.
- **Section D** of the questionnaire measured respondents' level of PsyCap.

These measuring instruments are outlined below. It was considered that the scale length could potentially influence the response rate. However, the subscales used were short and therefore lessened the chances of respondent fatigue.

5.5.2.1 Section B: The Psychological Recession Scale

Section B of the questionnaire includes a Psychological Recession Scale. The Psychological Recession Scale incorporated the following subscales:

- Job insecurity, job loss and unemployment (Section B1)
- Work-family conflict (Section B2)
- Organisational change and psychological uncertainty (Section B3)
- Work-related tension and psychological distress (Section B4)

Validated questionnaires from several authors (Bosman, Rothman & Buitendach, 2005; House & Rizzo, 1972; Kopelman, Greenhaus & Connolly, 1983; Milliken, 1987; Poisat & Theron, 2014) were combined into a single scale that measured the impact of a psychological recession.

These subscales are discussed in more detail in the following sections.

5.5.2.1.1 Section B1: Job insecurity, job loss and unemployment

The Job Insecurity Questionnaire (JIQ), developed by Bosman, Rothman and Buitendach (2005), consisting of six items, was included as a subscale to measure the respondents' level of job insecurity. The subscale focused on two components of job insecurity, namely the cognitive comprehension of the possibility of job loss (three items), as well as the affective reaction to job insecurity (three items) (Bosman, Rothman & Buitendach, 2005). The items of the JIQ measuring global job insecurity are reported to have a satisfactory Cronbach's alpha coefficient of 0.92 (De Witte, 2000).

In research done in South Africa using this scale, Heymans (2002) obtained an alpha coefficient of 0.84. For this scale, all items are measured on a five-point Likert scale with response options ranging from strongly disagree (1) to strongly agree (5). Higher scores obtained for this scale indicates more job security.

5.5.2.1.2 Section B2: Work-family conflict

The work-family conflict scale was originally developed by Kopelman, Greenhaus and Connolly (1983). This scale uses eight items to assess the extent of the inter-role conflict that occurs between work and family roles (Fields, 2002). In previous studies, coefficient alpha values obtained ranged from 0.78 to 0.90 (Thomas & Ganster, 1995). Responses are elicited on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

5.5.2.1.3 Section B3: Organisational change and psychological uncertainty

The scale incorporates six items. Three of these items were used in a survey by Poisat and Theron (2014).

This survey measured stress resulting from organisational restructuring and produced an overall Cronbach coefficient alpha value of 0.88 (Poisat & Theron, 2014). An additional three-item scale that measures an employee's psychological uncertainty as a result of organisational change was sourced from Milliken (1987). In a previous study conducted by Rafferty and Griffin (2006), coefficient alpha values for the psychological uncertainty scale ranged from 0.88 to 0.91 (Rafferty & Griffin, 2006).

5.5.2.1.4 Section B4: Work-related tension and psychological distress

The Work Tension Scale, which consists of seven items, was developed by House and Rizzo (1972), and used to measure employees' psychological and psychosomatic symptoms associated with tension experienced at work, as a result of a psychological recession. Coefficient alpha values obtained before ranged from 0.71 to 0.89 (Fields, 2002). Responses are elicited on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

5.5.2.2 Section C: Positive HRM practices

The positive HRM practices scale consists of six sub-scales and a total of 37 items. This scale incorporates aspects of the high-performance work system model developed by Appelbaum (2000). This model suggests that five distinct, supportive HRM practices may influence employees' work-related attitudes and performance behaviour. These HRM practices, according to Parè and Tremblay (2007), include the following:

- *Empowerment* – Allowing employees to enjoy increased autonomy when they perform their jobs.
- *Competence development practices* – Investing in employees' growth and development through job rotation programmes, mentoring and training interventions.
- *Information-sharing practices* – Sharing information on aspects such as financial performance, operational measures and the organisation's strategy. These practices convey to employees that the organisation trusts and wants to engage them.

- *Recognition* – These practices enhance employee motivation and include efforts made by the organisation to carefully consider employee suggestions, appreciate quality work and achievements.
- *Fair organisational rewards* – These practices signal to employees that the organisation supports them and has their well-being at heart.

Four of the above positive HRM practices scales (i.e. recognition, empowerment, fair rewards, and competence development practices) were developed by Tremblay, Rondeau and Lemelin (1998). In their study, a nine-item scale adapted from the survey of Lawler, Mohrman and Ledford (1992), measured information-sharing practices. A composite questionnaire incorporating the above scales was previously used in a study by Parè and Tremblay (2007), and the reliability coefficients obtained for the five positive HRM practices scales ranged from 0.73 to 0.90.

Participants in this study responded to a series of questions designed to assess evaluations of their organisation's HRM practices pertaining to the five components of the high-performance work system model.

As recessions have a negative impact on the health, well-being and functioning of employees at all levels (Antoniou & Cooper, 2013), an additional scale, consisting of seven items, was developed that measured employees' perceptions and evaluations of their organisation's wellness interventions. Each item was answered using a five-point Likert scale ranging from strongly agree (5) to strongly disagree (1).

With regard to the questionnaire, the positive HRM practices scale was structured and coded as follow:

- Section C1: Recognition practices
- Section C2: Empowerment practices
- Section C3: Competence development practices
- Section C4: Fair rewards practices
- Section C5: Information-sharing practices
- Section C6: Employee wellness practices

5.5.2.3 Section D: PsyCap Scale (PCQ-24)

PsyCap is a recently developed construct that is measured by the Psychological Capital Questionnaire 24 (PCQ-24). The PsyCap measure used in this study was developed by Luthans, Youssef and Avolio (2007) and consists of a subscale for each of the four PsyCap components, namely hope, self-efficacy, resilience and optimism.

All items in this scale were measured using a five-point Likert scale with response options ranging from strongly disagree (1) to strongly agree (5). Although the PCQ-24 has internationally undergone extensive psychometric scrutiny and received support based on samples representing manufacturing, service, high-tech, education, military and cross cultural sectors (Luthans, Youssef & Avolio, 2007), only one published South African study on the instrument exists (Görgens-Ekermans & Herbert, 2013). The objectives of Görgens-Ekermans and Herbert's study were to investigate the internal validity (construct and discriminant validity), reliability and external validity (relationship with theoretically relevant variables, such as stress, burnout, and work engagement) of the PCQ-24.

Each of the four components of PsyCap is measured by six items. The efficacy/confidence subscale is measured by items D1.1 to D1.6, hope by items D1.7 to D1.12, resiliency by items D1.13 to D1.18, and optimism by items D1.19 to D1.24 (Luthans, Youssef & Avolio, 2007). It should be noted that questionnaire items D1.13, D1.20, and D1.23 are reversely scored. In a previous study by Avey, Patera and West (2006), the overall reliability of the PCQ-24 was acceptable with a Cronbach Alpha of 0.90 obtained.

5.5.3 Pilot study

The term "pilot study" in social science is used in two different ways. According to Polit, Beck and Hungler (2001), pilot studies can refer to feasibility studies in which trial runs are done in preparation for a major study. However, a pilot study can also be used to pre-test a particular research instrument (Baker, 1994).

Ethridge (2004) suggests that surveys should be pre-tested to determine whether the survey is perceived and received by respondents as anticipated. Pilot studies also assist the researcher to detect flaws in the measurement procedures and identify ambiguous questionnaire items (Welman, Kruger & Mitchell, 2005). According to Van Teijlingen and Hundley (2002) the reasons for conducting pilot studies include the following:

- Developing and testing the adequacy of research instruments;
- Assessing the feasibility of a full-scale study;
- Assessing whether the research protocol is realistic and workable; and
- Identifying any logistical problems, which might occur using the proposed methods.

Regarding the present study, the following approach was adopted in conducting a pilot study of the questionnaire survey:

- Senior academics in the field of Human Resource Management and Organisational Behaviour were requested to comment on the questionnaire layout and questionnaire items as well as the rating scales used in the questionnaire.
- A qualified statistician was requested to scrutinise the questionnaire to ensure that wording, content and relevance of questions were appropriate for the purpose of the study.
- Several HR officials at the West Rand Department of Health were requested to complete the questionnaire and assess the following items:
 - Time taken to complete the questionnaire;
 - Clarity of the questions and terminology;
 - Questionnaire layout;
 - Clarity of instructions for completing the questionnaire; and
 - Any questionnaire items that could have a negative influence on the respondents.

The feedback obtained from those who participated in the pilot study was used to refine the questionnaire before it was distributed to all potential respondents.

5.5.4 Administration of the questionnaire

For the study to take place, it was necessary for the researcher to obtain permission from the West Rand Health District HR Manager. An official letter granting permission to conduct the study was emailed to the researcher. A copy of this letter can be found in Annexure C.

One of the academic and ethical requirements for conducting the study was to obtain ethical approval from Nelson Mandela University before the empirical study could be launched. The ethics approval number for this study is H-15-BES-ACC-021 (Refer to Annexure D).

Once ethics approval was obtained from Nelson Mandela University, the West Rand Health District HR Manager distributed the questionnaires directly to each facility's operational manager, as operational managers are solely responsible for the effective management of HR, equipment, finances and any other administration in a clinic (Wentzel, 2008). Furthermore, operational managers also supervise the staff of the clinic and are responsible and accountable for achieving the goals of the institution (Freed & Dawson, 2006). For this reason, operational managers were requested to only administer the questionnaires to staff members belonging to the occupational groups specified in the sampling frame. Furthermore, employees were requested to put completed questionnaires into A4 envelopes and return the sealed envelopes to the West Rand District HR Office by a specified date.

As already indicated, a cover letter explaining the procedure and instructions to complete the questionnaires was also attached to the questionnaires. The cover letter clearly indicated that the survey was completely anonymous, and that no specific identifying information would be requested from the participants. Voluntary participation in the study served as consent. According to Babbie (2015) it is generally advisable to plan follow-up mailings in the case of self-administered questionnaires. For this reason, the West Rand Health District HR Manager regularly followed up with operational managers and requested them to remind their staff to complete and return the questionnaires.

5.5.5 Response rate and analysis of biographical details

Questionnaires were distributed to potential respondents on Thursday, 9 February 2017. Since Krejcie and Morgan's (1970) decision guideline recommended a sample size of at least 300 respondents for a population size of 1 336, a total of 450 questionnaires were distributed to the sample group to account for non-responses and incomplete questionnaires.

The researcher used the following formula to calculate the response rate for the present study (FluidSurveys, 2014; SurveyMonkey, 2017):

$$\text{Response rate} = \frac{\text{Number of completed, usable surveys received}}{\text{Number of questionnaires distributed}} \times 100$$

A period of two weeks was allowed for the completion of the questionnaire, and operational managers were requested to submit completed questionnaires to the West Rand District HR Office by Friday, 24 February 2017. A total of 333 questionnaires were returned to the researcher. However, since 15 questionnaires were excluded due to unanswered questions and duplicated entries, a total of 318 completed, usable questionnaires were returned and captured for analysis, representing a response rate of 71%. Since a representative sample of at least 300 potential respondents was selected for the study by using Krejcie and Morgan's (1970) decision guideline, the sample size of 318 exceeded the number recommended for the size of the chosen target population.

This good response rate can be attributed to inter alia: the participants being informed well in advance of the research study, buy-in from the West Rand Health District HR Manager and the assistance of operational managers in administering the questionnaires to their staff members. According to Babbie (2015), the overall response rate serves as a guide to the representativeness of the sample respondents of the population. The higher response rate achieved, the less chance there is of response bias. Researchers are often unsure as to what constitutes an acceptable response rate (Babbie, 2015; Nulty, 2008).

Babbie (2015) states that a response rate of 50% is acceptable for data analysis and reporting, one of 60% is good, and 70% is considered to be very good. Baruch (1999) investigated response rates reported by 141 published research studies and 175 surveys in five top management journals published in 1975, 1985 and 1995. He found that the overall average response rate was 55.6% (Baruch, 1999). Given the foregoing, the response rate of 71% received for the present study was therefore considered acceptable in an investigation of this scope.

The demographic composition of the research sample is shown in Table 5.9 on the following page. As can be seen from Table 5.9, the sample was dominated by females (83%) as opposed to males (17%), which may be a result of the industry in which the study was undertaken. Further to this, the largest number of respondents (33.3%) was between the ages of 30 and 39, while 32.7% of the respondents were between the ages of 40 and 49. Only 3.8% of the sample was above the age of 60. The majority of respondents (94.3%) who participated in the study were African, which is reflective of the staff compliment at the West Rand District Department of Health. With regard to employment type, it is evident from Table 5.9 that most of the respondents (80.2%) were permanently employed by the West Rand District Department of Health. Since PHC nurses form the backbone of the South African health system (Delobelle et al., 2011), it is evident from Table 5.9 that most of the respondents (40.3%) were employed as professional nurses/CNPs, followed by enrolled nurses (20.1%). Concerning marital status, Table 5.9 shows that the majority of respondents were married (45.9%).

The sample profile of respondents who participated in this study is summarised and presented in Table 5.8.

Table 5.8: Summary of sample profile

SAMPLE PROFILE
The majority of respondents who took part in this study were female, between the ages of 30 and 39 years old, African, permanently employed, employed as professional nurses/CNPs and married.

Table 5.9: Frequency distribution of demographic variables of the sample (n=318).

DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE (%)
GENDER (n=318)		
Male	54	17%
Female	264	83%
Total	318	100%
AGE (n=318)		
20 – 29	46	14.5%
30 – 39	106	33.3%
40 – 49	104	32.7%
50 – 59	50	15.7%
60+	12	3.8%
Total	318	100%
ETHNICITY (n=318)		
African	300	94.3%
Coloured	5	1.6%
Indian	2	0.6%
White	11	3.5%
Total	318	100%
EMPLOYMENT (n=318)		
Permanent	255	80.2%
Contract	63	19.8%
Total	318	100%
HRH CATEGORY (n=318)		
Facility operational manager	21	6.6%
Professional nurse/CNP	128	40.3%
Enrolled nurse	64	20.1%
Lay counsellor	28	8.8%
Admin clerk/data capturer	63	19.8%
Pharmacy assistant	14	4.4%
Total	318	100%
MARITAL STATUS (n=318)		
Single	132	41.5%
Cohabiting	10	3.1%
Married	146	45.9%
Divorced	19	6%
Widow/Widower	11	3.5%
Total	318	100%

5.5.6 Proportionate representation of the target population

As already indicated, proportionate stratified random sampling was selected and utilised as the preferred sampling method. The researcher used this sampling method to guarantee a proportionate representation of the target population, by selecting the ideal number of participants per core HRH category (i.e. stratum) to participate in the study. With this method, the researcher first identified a set of mutually exclusive and exhaustive categories (strata) and divided the target population into these strata. The researcher then used random selection to select the respondents from each stratum. Table 5.10 illustrates the proportionate representation of the target population.

Table 5.10: Proportionate representation of the target population

Core HRH categories (Strata)	Population size per stratum	Simple random sample*	Stratified sample**	Representation
Facility operational manager	90	21	20	+1
Professional nurse/CNP	430	128	97	+31
Enrolled nurse	239	64	54	+10
Lay counsellor	295	28	66	-38
Admin clerk/data capturer	264	63	59	+4
Pharmacy assistant	18	14	4	+10
Total	1 336	318	300	18
<p>*Simple random sample The actual number of responses obtained from the sample. Respondents were selected by means of random selection.</p> <p>**Stratified sample The ideal number of participants that should be randomly selected from the population per HRH category (stratum) to participate in the study. The stratified sample gives an accurate representation of each stratum.</p>				

As can be seen in Table 5.10, the simple random sample method resulted in an overrepresentation of professional nurses/CNPs, enrolled nurses, admin clerks/data capturers, and pharmacy assistants, but an underrepresentation of lay counsellors. This was mainly because most lay counsellors were not present at the facility when the study was conducted, as these employees frequently provided outreach services to the local community and were not based at the clinic on a full-time basis.

The overrepresentation may also be attributed to the fact that the total number of responses received from the sample (318) exceeded the recommended sample size of the chosen target population (300).

5.6 DATA ANALYSIS TECHNIQUES USED IN THIS STUDY

The challenge facing researchers when confronted with a data matrix (coded raw data obtained from surveys) is data summarisation (Burns & Bush, 2010). Data summarisation entails statistical analysis through which the researcher condenses the data, highlights underlying patterns, applies understandable conceptualisations, or generalises sample findings to the population (Burns & Bush, 2010). The empirical data obtained from this study was processed with the assistance of a qualified statistician from Nelson Mandela University, as well as an external statistical consultant. The researcher then analysed and interpreted the data. Descriptive and inferential statistics are two types of statistical analysis used to reduce a data matrix (Burns & Bush, 2010). This section provides a brief discussion of the statistical analysis used in the study.

5.6.1 Descriptive statistical techniques

Descriptive analysis is an elementary transformation of data and describes the basic characteristics of data such as the central tendency, variability and distribution (Zikmund & Babin, 2013). According to Burns and Bush (2010), descriptive analysis reveals the typical respondent and the general response pattern, and is subsequently the basis for succeeding inferential analysis. Descriptive statistics include measures of location or central tendency (mean), measures of variability or dispersion (standard deviation) and measures of shape (skewness and kurtosis) (Hair, Black, Babin, Anderson & Tatham, 2006). The descriptive statistical techniques utilised in the present study are presented in Table 5.11.

5.6.2 Inferential statistical techniques

Where descriptive statistics describe a set of sample observations, inferential statistics allow the researcher to make inferences pertaining to the hypotheses (Babbie & Mouton, 2001).

Since the data for this study was obtained from a non-probability sampling technique, statistical inference (p-values) as well as effect size (d-values) was calculated where appropriate to assist with the interpretation of the data. The hypotheses formulated for this study were tested using the following parametric tests:

- One sample t-test
- Pearson's product moment correlation coefficient
- SEM
- Multiple regression analysis

The above inferential statistical techniques enabled the researcher to investigate and highlight the most crucial HRM practices that contribute towards the development of employees' psychological capital during a psychological recession. The one-sample t-test allowed the researcher to determine whether the respondents experienced the negative effects of a psychological recession. Pearson's product moment correlations indicated the degree and direction of the relationships depicted in the hypotheses. In addition to this, multiple regression analysis allowed the researcher to determine how multiple independent variables simultaneously affected the dependent variable (i.e. PsyCap) and the direction and size of the effect of each independent variable (i.e. HRM practices and psychological recession) on each dependent variable (i.e. PsyCap) (Neuman, 2011).

Lastly, SEM allowed the researcher to investigate and measure the relationships among the set of variables illustrated in the theoretical model. According to Hair, Black, Babin, Anderson and Tatham (2006), SEM can be defined as a multivariate statistical technique that combines aspects of multiple regression analysis and factor analysis. SEM surpasses traditional regression models by including multiple independent and dependent variables to test associated hypotheses (De Carvalho & Chima, 2014). SPSS Version 24 was utilised to perform the above statistical analyses. The SEM analysis was conducted by using Amos version 24 (IBM Corp., 2016).

The analyses and findings are presented and discussed in Chapter Six.

Table 5.11: Descriptive statistical techniques used in this study

Descriptive statistical techniques	Definition	Application in this study's results
Mean	The average number characterising a set of numbers (Burns & Bush, 2010)	Tables 6.2, 6.4, 6.6, 6.8, 6.10, 6.12, 6.13, 6.27
Percentage	A proportion of an answered question in a certain manner, multiplied by 100 and signifies the relationships between variables in a simple and useful way (Wiid & Diggines, 2009)	Infographics 6.1, 6.2, 6.3, 6.4 Charts 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10 Tables 5.9, 6.1, 6.3, 6.5, 6.7, 6.9, 6.11, 6.14, 6.21, 6.22, 6.23, 6.24, 6.25, 6.26
Frequency	A statistical description of the simplest kind which entails a straight frequency count of cases or responses which fall into each category where the categories are based on only one variable (Crouch & Housden, 2003)	Tables 5.9, 6.1, 6.3, 6.5, 6.7, 6.9, 6.11, 6.14
Standard deviation	The square root of the variance in which the variance represents the mean squared deviation from the mean. A small variance is evident when data points are clustered around the mean, and the variance is large when data points are scattered from the mean therefore indicating how much responses vary from the mean obtained from the entire population (Malhotra, 2007)	Tables 6.2, 6.4, 6.6, 6.8, 6.10, 6.12, 6.13, 6.27
Skewness	The skewness indicates the symmetry of the distribution. The skewness of a distribution should be less than an absolute value of 2.00 to be effectively considered as being within the acceptable limits of normality (West, Finch & Curran, 1995).	Table 6.13 Section 6.3: Inferential statistics and hypothesis testing
Kurtosis	The kurtosis provides an indication of the "peakedness" of the distribution. A kurtosis should be less than an absolute value of 7.00 to be considered as being within the acceptable limits of normality (West, Finch & Curran, 1995).	Table 6.13 Section 6.3: Inferential statistics and hypothesis testing

5.6.3 Exploratory Factor Analysis (EFA)

To examine the factor structure and reliability of the measurement instruments utilised in the current study, the instruments were revalidated by way of EFA. EFA is a statistical method used mostly for data reduction purposes, which is achieved by observing clusters among the inter-correlations of a set of variables (Pallant, 2011). A reduction of factors provide a more focused view of the independent variables that could potentially predict the dependent variables (Rummel, 1970). Principle Component Analysis (PCA) as EFA method was conducted to determine how many factors in the scales best suited the data in the study. According to Tabachnick and Fidell (2001), PCA assists in reducing a large number of variables into a smaller number of components. As a general guideline, the sample size should be at least 300 for EFA to be conducted. Regarding the present study, a sample size of 318 respondents was therefore sufficient for EFA to be employed.

The following actions were taken during the EFA for each of the constructs measured:

- The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity (BTS) were calculated to determine whether EFA was feasible. A KMO value greater than 0.5 (Malhotra, 2007) and a BTS which is significant ($p < 0.05$) indicate suitability for factor analysis (Williams, Brown & Onsman, 2012).
- An examination of eigenvalues determined the number of factors within each scale. According to Terre Blanche and Durrheim (1999), the general convention is that only factors with an eigenvalue of more than one should be considered as meaningful factors.
- A Scree test was applied to detect "clear breaks" between the eigenvalues, with these breaks suggesting a possible number of factors to extract.
- Based on the number of factors identified, a Principal Axis Factor Analysis with an Oblimin rotation (i.e. an oblique method) was conducted.
- This was followed by examining the factor loadings, which show the relative contribution of each item to a factor.
- Since the goal of conducting EFA was to develop a robust measure with a high degree of content validity, each factor solution was examined to

ensure that the set of items contained therein represented a single clear construct and conformed to theoretical expectations.

The following general decision guidelines were applied in appraising the results of the EFA carried out:

- Items with loadings greater than 0.35 were regarded as significant and were subsequently highlighted.
- Items which did not load greater than or equal to 0.35 on any factor were identified and omitted from the solution.
- Cross-loading items were identified and defined as having a secondary factor loading of 0.35 or higher, or having a small gap between the primary and secondary loading (i.e., less than 0.20 apart). In all cases, the cross loading items were eliminated. For example, if one item was deleted from a given factor, the same item was deleted from the other factors to maintain consistency among the scales. The remaining items provided a clearer and more concise picture of the factor of interest.
- Omitted items were removed from further analysis.

This procedure was repeated until the items converged satisfactorily on the factors and all problematic items had been removed. The factor structure and psychometric properties of the Psychological Recession Scale (Section B), positive HRM practices (Section C), and the PCQ-24 (Section D) measures are discussed in the following sections.

5.6.3.1 Section B: The Psychological Recession Scale

PCA was performed on Section B. PCA revealed a KMO of 0.916 and a significant BTS of 0.000. Data suitability for factor analysis was therefore confirmed and an EFA was conducted with an Oblimin rotation specifying a four-factor structure as per the original measuring instrument. The initial eigenvalues and the result of the first round of factor analysis are presented in Table 5.12 and 5.13 respectively.

Table 5.12: Initial eigenvalues of the Psychological Recession Scale

Component	Initial eigenvalues		
	Total	% of Variance	Cumulative %
1	9.710	35.963	35.963
2	2.638	9.772	45.735
3	1.532	5.673	51.408
4	1.319	4.884	56.292
5	1.107	4.099	60.391
6	0.966	3.576	63.968
7	0.868	3.216	67.184
8	0.849	3.143	70.327
9	0.753	2.789	73.117
10	0.687	2.545	75.662
11	0.649	2.402	78.064
12	0.614	2.276	80.340
13	0.563	2.085	82.425
14	0.513	1.901	84.326
15	0.469	1.737	86.063
16	0.442	1.636	87.699
17	0.414	1.533	89.231
18	0.396	1.467	90.698
19	0.360	1.335	92.033
20	0.340	1.261	93.294
21	0.336	1.245	94.538
22	0.294	1.087	95.625
23	0.277	1.026	96.652
24	0.259	0.960	97.612
25	0.228	0.846	98.458
26	0.221	0.820	99.278
27	0.195	0.722	100.000

Extraction Method: Principal Component Analysis.

As can be seen in Table 5.12, five eigenvalues were higher than one. However, since the fifth one was only marginally higher than one and the percentage variance explained by the four factors was above 50% (56.29%), only four factors were extracted. As can be seen in Table 5.13, the eight items that loaded on Factor 1 (items B2.1 to B2.8) were all intended to measure perceptions of work-family conflict, therefore confirming that Factor 1 represents the work-family conflict subscale.

Table 5.13: Results of the EFA on the four-factor solution of the Psychological Recession Scale

Pattern matrix ^a				
Items	Factors			
	1	2	3	4
B1_1	0.046	0.208	0.303	-0.061
B1_2	-0.106	0.352	0.147	0.069
B1_3	-0.105	0.541	0.329	0.072
B1_4	0.230	0.694	0.026	-0.121
B1_5	0.130	0.759	-0.078	0.036
B1_6	0.001	0.639	-0.194	0.195
B2_1	0.564	0.215	0.030	-0.001
B2_2	0.774	0.024	-0.108	0.011
B2_3	0.830	-0.067	-0.089	-0.039
B2_4	0.400	-0.092	0.109	0.098
B2_5	0.510	0.032	0.136	0.156
B2_6	0.606	0.108	-0.004	0.205
B2_7	0.702	0.076	0.051	-0.023
B2_8	0.669	0.087	0.206	-0.096
B3_1	0.058	0.428	0.328	0.109
B3_2	0.080	0.650	0.227	-0.026
B3_3	0.071	0.440	0.547	-0.117
B3_4	0.088	-0.006	0.649	-0.092
B3_5	0.006	0.086	0.632	0.113
B3_6	0.055	0.091	0.562	0.080
B4_1	0.451	-0.075	0.373	0.088
B4_2	0.327	-0.166	0.391	0.311
B4_3	0.215	-0.031	0.572	0.195
B4_4	0.124	0.033	0.124	0.382
B4_5	0.252	0.087	0.216	0.452
B4_6	0.089	0.011	0.510	0.294
B4_7	-0.017	0.086	-0.080	0.651

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.
a. Rotation converged in 15 iterations.

Item B4.1 (“My job enables me to maintain my health”) cross-loaded onto Factor 3 and it was decided to remove this item from Factor 1, as this item was not relevant to the measurement of work-family conflict. After scrutinising the individual item loadings for Factor 2, it became evident that items B1.2 to B1.6 related to the job insecurity, job loss and unemployment subscale, whilst items B3.1 to B3.3 related more to the organisational change and psychological

uncertainty subscale. Item B3.3 was removed from Factor 2 as it cross-loaded onto Factor 3.

The content of items that was loaded onto Factor 2 was carefully considered for commonality, and it was therefore decided to retain items B3.1 (“My organisation has a good track record for retaining people rather than retrenching them”) and item B3.2 (“My company is relatively stable”). These two items also assessed the factor of interest (i.e. job insecurity, job loss and unemployment). Furthermore, item B3.2 also assessed whether respondents’ perceived their organisation as stable, which is an important aspect of job security (Gurchiek, 2010). These changes ensured that the theoretical construct of job insecurity, job loss and unemployment was adequately covered.

With regard to Factor 3, items B3.3 to B3.6 were all intended to measure perceptions of organisational change and psychological uncertainty, and items B4.1 to B4.3 and B4.6 were intended to measure work-related tension and psychological distress. Item B3.3 was removed as it cross-loaded onto Factor 2.

After careful consideration, items B4.1 to B4.3 and B4.6 were also eliminated from Factor 3 as these items primarily tapped into the domain of work-related tension and psychological distress. Furthermore, these items would have negatively impacted the conceptual and theoretical meaning of Factor 3 when combined with items B3.4, B3.5 and B3.6. Therefore, only three items were retained to measure perceptions of organisational change and psychological uncertainty. As a general rule, there should be three or more items in any single factor (Harris, 2012). These three items were therefore sufficient to adequately measure Factor 3. An analysis of factor loadings in Table 5.12 demonstrated that the original work-related tension and psychological distress items loaded correctly on Factor 4 (items B4.4, B4.5 and B4.7). For the purpose of this study, the names of Factors 1, 2, 3 and 4 remained unchanged.

Based on the above changes, a second EFA was conducted by excluding the problematic items outlined above. As can be seen in Table 5.14, all items now loaded satisfactorily onto the relevant factors.

Table 5.14: Results of the EFA on the Psychological Recession Scale excluding items B1.1, B3.3, B4.1, B4.2, B4.3 and B4.6.

Pattern matrix ^a				
Items	Factor			
	1	2	3	4
B1_2	-0.088	0.395	0.102	0.098
B1_3	-0.082	0.584	0.240	0.043
B1_4	0.179	0.770	-0.003	-0.164
B1_5	0.096	0.846	-0.150	-0.019
B1_6	-0.049	0.549	-0.099	0.234
B2_1	0.536	0.189	0.054	0.031
B2_2	0.779	0.016	-0.104	0.013
B2_3	0.824	-0.069	-0.088	-0.028
B2_4	0.413	-0.107	0.134	0.094
B2_5	0.518	0.008	0.169	0.160
B2_6	0.620	0.061	0.019	0.238
B2_7	0.686	0.086	0.070	-0.035
B2_8	0.666	0.116	0.178	-0.107
B3_1	0.083	0.464	0.256	0.083
B3_2	0.067	0.671	0.199	-0.048
B3_4	0.125	0.042	0.578	-0.107
B3_5	0.001	0.041	0.738	0.102
B3_6	0.024	0.036	0.717	0.067
B4_4	0.158	0.028	0.107	0.373
B4_5	0.328	0.101	0.158	0.401
B4_7	0.033	0.041	-0.034	0.604

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 7 iterations.

The four factors that were measured in Section B were therefore work-family conflict (Factor 1), job insecurity, job loss and unemployment (Factor 2), organisational change and psychological uncertainty (Factor 3) and work-related tension and psychological distress (Factor 4).

5.6.3.2 Section C: Positive HRM practices

The results of the PCA for the positive HRM practices scale revealed an acceptable KMO of 0.942, as well as a significant BTS of 0.000. Table 5.15 shows the initial eigenvalues of the positive HRM practices scale.

Table 5.15: Initial eigenvalues of the positive HRM practices scale

Component	Initial eigenvalues		
	Total	% of Variance	Cumulative %
1	15.905	42.986	42.986
2	2.573	6.953	49.938
3	2.295	6.203	56.141
4	1.794	4.850	60.991
5	1.346	3.637	64.628
6	1.073	2.901	67.529
7	0.938	2.535	70.064
8	0.832	2.248	72.312
9	0.763	2.061	74.373
10	0.666	1.800	76.174
11	0.639	1.728	77.901
12	0.622	1.680	79.582
13	0.596	1.611	81.192
14	0.529	1.429	82.622
15	0.500	1.352	83.974
16	0.466	1.260	85.234
17	0.424	1.146	86.379
18	0.401	1.084	87.464
19	0.384	1.037	88.501
20	0.367	0.992	89.492
21	0.347	0.937	90.430
22	0.318	0.860	91.290
23	0.312	0.844	92.134
24	0.306	0.826	92.960
25	0.287	0.777	93.737
26	0.266	0.718	94.455
27	0.261	0.706	95.160
28	0.237	0.641	95.801
29	0.222	0.601	96.402
30	0.215	0.581	96.982
31	0.202	0.547	97.529
32	0.189	0.511	98.040
33	0.175	0.473	98.514
34	0.168	0.455	98.968
35	0.152	0.410	99.378

36	0.126	0.341	99.719
37	0.104	0.281	100.000
Extraction Method: Principal Component Analysis.			

As can be seen in Table 5.15, six principal components showed eigenvalues above one, explaining 68% of the total variance. However, only five factors were extracted since the sixth factor was only marginally higher than one (1.073), and the percentage variance explained by the five factors was still above 50% (65%). Table 5.16 shows the results of the EFA on the five-factor solution of the positive HRM practices scale.

Table 5.16: Results of the EFA on the five-factor solution of the positive HRM practices scale

Pattern matrix ^a					
Items	Factor				
	1	2	3	4	5
C1_1	0.711	0.114	0.096	-0.060	-0.034
C1_2	0.762	0.066	0.074	0.014	-0.064
C1_3	0.664	0.034	0.069	0.049	-0.075
C1_4	0.686	0.025	0.112	-0.078	-0.033
C1_5	0.725	-0.103	0.036	-0.092	0.136
C1_6	0.673	-0.103	0.069	0.041	0.141
C2_1	0.776	0.018	-0.041	-0.002	0.088
C2_2	0.695	0.042	-0.064	0.142	0.094
C2_3	0.702	0.067	-0.081	0.137	0.034
C2_4	0.540	0.009	-0.069	0.396	-0.099
C2_5	0.505	0.020	-0.080	0.463	-0.056
C3_1	0.119	0.072	0.208	0.468	-0.023
C3_2	0.074	-0.070	0.154	0.506	0.092
C3_3	0.013	0.048	0.098	0.629	0.107
C3_4	0.066	0.107	0.056	0.595	0.115
C3_5	-0.020	0.068	0.103	0.693	-0.039
C3_6	0.131	0.044	0.005	0.660	0.037
C4_1	0.012	0.876	0.030	-0.032	0.012
C4_2	-0.081	0.936	0.021	0.006	-0.021
C4_3	0.077	0.695	0.057	0.033	-0.012
C4_4	0.024	0.578	-0.037	0.055	0.156
C5_1	0.120	0.175	0.076	-0.004	0.533
C5_2	0.207	0.239	0.083	-0.151	0.552
C5_3	0.073	0.132	-0.065	0.340	0.473

C5_4	0.067	0.075	0.090	0.087	0.699
C5_5	0.049	0.096	0.061	0.314	0.476
C5_6	0.194	0.096	0.160	0.223	0.363
C5_7	0.029	0.155	0.123	0.303	0.359
C5_8	0.416	0.145	0.046	0.111	0.312
C5_9	0.057	-0.045	0.164	0.365	0.392
C6_1	0.036	-0.060	0.557	0.129	0.217
C6_2	0.004	-0.088	0.576	0.138	0.253
C6_3	0.063	-0.140	0.781	0.069	0.041
C6_4	0.030	0.109	0.781	-0.043	0.062
C6_5	0.023	0.063	0.814	-0.077	0.040
C6_6	0.023	0.075	0.682	0.042	-0.120
C6_7	0.010	0.077	0.642	0.045	-0.108
Extraction Method: Principal Axis Factoring.					
Rotation Method: Oblimin with Kaiser Normalization.					
a. Rotation converged in 14 iterations.					

Factor 1 corresponded with the recognition and empowerment practices subscales. It is evident from Table 5.16 that all of the items related to recognition practices (items C1.1 to C1.6) and empowerment practices (items C2.1 to C2.5) loaded onto Factor 1. However, items C2.4 and C2.5 were eliminated from Factor 1 as these two items cross-loaded on Factor 4. To avoid duplication of items, item C5.8 (“Employees’ suggestions are followed up”) was eliminated from Factor 1, since this item was very similar to item C1.1 (“Employees’ suggestions are taken seriously”). Furthermore, item C5.8 was specifically related to information-sharing practices in the original measurement model. Factor 1 was therefore labelled “recognition-empowerment”, as these two constructs seemed to be intertwined. When employees feel under-noticed, under-praised, and under-appreciated, they are less likely to feel empowered and have an increased sense of responsibility (Heathfield, 2017; Mosley & Irvine, 2014).

An analysis of factor loadings demonstrated that the original items loaded on Factor 2 and 3. The four items that loaded onto Factor 2 were all intended to measure fair rewards practices, while the seven items loaded onto Factor 3 were intended to measure employee wellness practices. The items that loaded onto Factor 4 related to the competence development practices subscale (items C3.1 to C3.6), as well as an additional item related to the information-sharing practices subscale (item C5.9).

However, item C5.9 was removed from Factor 4 as it cross-loaded on Factor 5. Furthermore, items C2.4 and C2.5 were also eliminated from Factor 4 as these two items cross-loaded on Factor 1. Items loading exclusively onto Factor 5 tap into the domain of information-sharing practices (items C5.1 to C5.7 and C5.9). However, item C5.9 was eliminated from Factor 5 as it cross-loaded onto Factor 4. For the purpose of this study, the original names of Factors 2, 3, 4 and 5 remained unchanged.

Based on the above changes, a second round of EFA was conducted, excluding the problematic items as discussed previously. The results showed that all the items now loaded satisfactorily onto the factors, as can be seen in Table 5.17.

Table 5.17: Results of the EFA on the positive HRM practices scale excluding items C2.4, C2.5, C5.8 and C5.9.

Pattern matrix ^a					
Items	Factor				
	1	2	3	4	5
C1_1	0.722	0.117	0.068	-0.012	-0.088
C1_2	0.772	0.066	0.040	0.064	-0.121
C1_3	0.687	0.035	0.041	0.061	-0.110
C1_4	0.703	0.018	0.076	-0.046	-0.044
C1_5	0.747	-0.107	0.015	-0.081	0.126
C1_6	0.698	-0.109	0.048	0.047	0.119
C2_1	0.782	0.006	-0.056	0.009	0.084
C2_2	0.701	0.028	-0.079	0.137	0.098
C2_3	0.686	0.050	-0.081	0.115	0.064
C3_1	0.094	0.041	0.177	0.502	-0.018
C3_2	0.076	-0.082	0.125	0.530	0.048
C3_3	0.003	0.020	0.043	0.710	0.056
C3_4	0.053	0.075	-0.006	0.689	0.075
C3_5	-0.032	0.034	0.025	0.795	-0.082
C3_6	0.122	0.013	-0.059	0.737	0.000
C4_1	0.018	0.871	0.044	-0.045	0.032
C4_2	-0.068	0.928	0.023	0.010	-0.009
C4_3	0.095	0.685	0.041	0.068	-0.030
C4_4	0.026	0.563	-0.032	0.060	0.175
C5_1	0.113	0.160	0.089	0.034	0.519
C5_2	0.200	0.224	0.103	-0.113	0.549

C5_3	0.063	0.108	-0.047	0.327	0.487
C5_4	0.054	0.059	0.128	0.085	0.704
C5_5	0.061	0.080	0.062	0.333	0.438
C5_6	0.191	0.080	0.162	0.251	0.383
C5_7	0.029	0.148	0.142	0.297	0.431
C6_1	0.040	-0.055	0.565	0.125	0.183
C6_2	0.001	-0.092	0.581	0.151	0.224
C6_3	0.052	-0.143	0.788	0.063	0.035
C6_4	0.013	0.101	0.802	-0.050	0.071
C6_5	0.013	0.060	0.822	-0.063	0.027
C6_6	0.021	0.066	0.680	0.026	-0.100
C6_7	0.002	0.069	0.652	0.025	-0.094
Extraction Method: Principal Axis Factoring.					
Rotation Method: Oblimin with Kaiser Normalization.					
a. Rotation converged in 10 iterations.					

The five factors measured by Section C are therefore recognition-empowerment (Factor 1), fair rewards practices (Factor 2), employee wellness practices (Factor 3), competence development practices (Factor 4) and information-sharing practices (Factor 5).

5.6.3.3 Section D: PCQ-24

As indicated in section 5.5.2.3 the PCQ-24 was developed by Luthans, Youssef and Avolio (2007) and consists of a subscale for each of the four PsyCap components, namely hope, self-efficacy, resilience and optimism. Through an extensive EFA process conducted for purposes of this study, initially four factors emerged, but after scrutiny and refinement, these four factors were reduced to two factors.

Table 5.18 presents the initial eigenvalues of the PCQ-24 during the first round of EFA. The KMO and BTS measures were applied to the original responses received for the PCQ-24 questionnaire. The KMO index yielded a value of 0.943 and a Chi-Square value of 4535.747 (df = 276 and p-value = 0.000) respectively. These results were regarded as adequate evidence that a factor analysis could be employed.

Table 5.18: Initial eigenvalues of the PCQ-24 during the first round of EFA

Component	Initial eigenvalues		
	Total	% of Variance	Cumulative %
1	10.652	44.383	44.383
2	2.050	8.542	52.925
3	1.291	5.379	58.304
4	1.009	4.204	62.508
5	0.880	3.667	66.175
6	0.770	3.210	69.385
7	0.729	3.038	72.423
8	0.692	2.884	75.307
9	0.645	2.686	77.993
10	0.577	2.406	80.399
11	0.553	2.306	82.705
12	0.480	1.998	84.703
13	0.436	1.816	86.519
14	0.417	1.737	88.256
15	0.367	1.531	89.786
16	0.354	1.473	91.260
17	0.348	1.448	92.708
18	0.334	1.393	94.101
19	0.311	1.297	95.399
20	0.260	1.084	96.483
21	0.253	1.056	97.539
22	0.223	0.928	98.466
23	0.200	0.831	99.298
24	0.169	0.702	100.000

Extraction Method: Principal Component Analysis.

As can be seen in Table 5.18, the first round of factor analysis presented four eigenvalues larger than 1.0 as indicators of possible factors. The eigenvalues were 10.652, 2.050, 1.291 and 1.009 respectively. Factor 1 was responsible for 44.4% of the total variance explained, with an eigenvalue of 10.652. Factor 2 and 3 respectively accounted for approximately 9% and 5.3% of the total variance, while factor 4 explained 4.2% of the total variance. Cumulatively, these four factors explained 63% of the total variance. An examination of the factor loadings in Table 5.19 indicated that some items did not load onto the original intended factors.

Furthermore, two of the three reversed items of the PCQ-24 (items D1.13 and D1.20) formed a separate factor (factor 3) which was deemed problematic.

Table 5.19: Results of the first round of EFA on the PCQ-24

Pattern matrix ^a				
Items	Factors			
	1	2	3	4
D1_1	0.396	0.312	0.193	0.148
D1_2	0.737	0.049	0.089	0.109
D1_3	0.917	-0.073	-0.061	-0.048
D1_4	0.829	-0.025	-0.064	0.079
D1_5	0.781	-0.088	-0.024	-0.013
D1_6	0.603	0.139	-0.086	0.026
D1_7	0.377	0.294	0.098	0.178
D1_8	0.226	0.170	0.054	0.501
D1_9	0.290	0.417	0.133	0.254
D1_10	0.116	-0.048	-0.022	0.744
D1_11	0.091	0.066	-0.012	0.731
D1_12	0.061	0.093	-0.126	0.664
D1_13	0.008	0.103	0.556	-0.150
D1_14	0.123	0.457	-0.096	0.195
D1_15	-0.004	0.544	-0.090	0.207
D1_16	-0.032	0.664	-0.077	-0.105
D1_17	0.017	0.782	0.017	-0.063
D1_18	0.004	0.573	-0.006	0.234
D1_19	-0.016	0.479	-0.147	0.289
D1_20	-0.103	-0.146	0.655	0.053
D1_21	0.327	0.203	-0.077	0.363
D1_22	0.194	0.426	0.016	0.180
D1_23	-0.017	-0.136	0.335	0.077
D1_24	0.091	0.447	-0.172	0.064

Extraction Method: Principal Axis Factoring.
Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 12 iterations.

For these reasons, the four-factor solution was not accepted. Since only two eigenvalues greater than one emerged when the three reversed items (D1.13, D1.20 and D1.23) were excluded, a two-factor solution was specified in the second round of EFA.

As can be seen in Table 5.20, the results of this second round EFA indicate that items representing self-efficacy and hope loaded onto factor one and items representing resiliency and optimism loaded onto factor two.

According to Table 5.20, Factor 1 comprised items D1.1 to D1.12 (self-efficacy and hope), as well as items D1.21 and D1.22, which reflects two items from the optimism sub-scale. The content of items that loaded onto each factor was carefully considered by the researcher for commonality, and it was decided to remove items D1.21 and D1.22 from factor 1. Item D1.22 was also not satisfactory as it cross-loaded onto factor 2. According to Table 5.20 Factor 2 comprised of items D1.14 to D1.18 (Resilience), as well as items D1.19, D1.22 (which were omitted) and D1.24 (Optimism). The two factors explained 58.4% of the total variance.

Table 5.20: Results of the EFA on the PCQ-24 excluding reversed items (D1.13, D1.20 and D1.23)

Pattern matrix ^a		
Items	Factors	
	1	2
D1_1	0.554	0.179
D1_2	0.869	-0.075
D1_3	0.886	-0.135
D1_4	0.906	-0.068
D1_5	0.792	-0.163
D1_6	0.639	0.106
D1_7	0.555	0.206
D1_8	0.676	0.135
D1_9	0.539	0.316
D1_10	0.729	0.021
D1_11	0.708	0.113
D1_12	0.599	0.205
D1_14	0.270	0.509
D1_15	0.134	0.626
D1_16	-0.143	0.693
D1_17	-0.046	0.763
D1_18	0.184	0.603
D1_19	0.203	0.572
D1_21	0.644	0.220

D1_22	0.356	0.399
D1_24	0.132	0.508
Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.		
a. Rotation converged in 7 iterations.		

The results of the next round of EFA, in which the abovementioned items were excluded, are presented in Table 5.21.

Table 5.21: Results of the EFA on the PCQ-24 two-factor solution excluding items D1.21 and D1.22

Pattern matrix ^a		
Items	Factor	
	1	2
D1_1	0.554	0.183
D1_2	0.867	-0.067
D1_3	0.878	-0.120
D1_4	0.899	-0.052
D1_5	0.792	-0.155
D1_6	0.630	0.126
D1_7	0.547	0.220
D1_8	0.666	0.145
D1_9	0.532	0.322
D1_10	0.719	0.036
D1_11	0.703	0.127
D1_12	0.586	0.222
D1_14	0.267	0.502
D1_15	0.130	0.643
D1_16	-0.143	0.707
D1_17	-0.046	0.767
D1_18	0.187	0.604
D1_19	0.199	0.574
D1_24	0.128	0.488
Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.		
a. Rotation converged in 6 iterations.		

As can be seen in Table 5.21, the factors all loaded above the recommended 0.35 onto either of the two factors.

In a previous study, Du Plessis and Barkhuizen (2012) found that a three-factor model best represented their data gathered from a South African sample. The authors renamed their factors hopeful-confidence, resiliency and optimism.

Given the foregoing, the two factors that resulted in this study were labelled hopeful-confidence (Factor 1) as in the study by Du Plessis and Barkhuizen (2012) and positive outlook (Factor 2). For the purpose of this study, hopeful-confidence refers to having the confidence in one's abilities to take on challenging tasks and persevering in achieving goals. Positive outlook refers to being able to bounce back from adversity and expecting success in the present (now) and in the future (Pillay, 2012). The factor labelled positive outlook highlights the notion that adversity can be handled successfully, which is similar to Carver, Scheier and Segerstrom's (2010) definition of optimism. For this reason, it was decided to label Factor 2 as positive outlook.

The two-factor structure of PsyCap that emerged in the EFA was utilised for further inferential statistical analysis in this study. The reliability of the original and adapted measurement models is discussed in section 5.7.

5.7 RELIABILITY AND VALIDITY

According to Bryman and Bell (2007), two of the most prominent criteria for the evaluation and management of a research study are reliability and validity. During the construction of the questionnaire, the researcher applied the requirements of reliability and validity as outlined below. It should be borne in mind that, although reliability and validity are analytically distinguishable, they are related because validity presumes reliability. In other words, a measure that is not reliable will also not be valid (Bryman & Bell, 2007).

5.7.1 Reliability

According to Bryman and Bell (2007), reliability is concerned with the question of whether the results of the study are repeatable. Several methods can be used to test the reliability of measuring instruments. According to Sarantakos (2005) the most common methods to test reliability include the following:

- **Test-retest method:** The same subjects are tested and retested with the same measuring instrument. If the same results are obtained the instrument is reliable.
- **Alternate-form reliability:** Reliability is tested by administering two similar instruments in one session, and is assessed by the degree of correlation between the scores of the two groups.
- **Inter-item test and item-scale test:** Inter-item correlations or item-scale correlations indicate the degree of consistency of the instrument.
- **Split-half method:** Responses to the items of a measuring instrument are divided into two groups and the scores are then correlated. The type and degree of correlation indicate the degree of reliability of the measurement.

According to Babbie (2010), another way to ensure a measuring instrument's reliability is to use measures that have been previously validated in former studies. Concerning the present study, the researcher considered the reliability of the various scales obtained in previous research. To confirm that the measuring instruments would produce consistent, reliable results, Cronbach's coefficient alphas were calculated for each instrument, as well as for the subscales. According to Struwig and Stead (2013), Cronbach's coefficient alpha is particularly useful for measures that have Likert-type rating scales.

Factor analysis, as presented in Section 5.6.3, was employed to establish whether or not all the items in the survey were necessary for calculating total scores, or whether removing problematic items would improve the reliability. The internal reliability coefficients obtained for the scale scores in this study are reported in Table 5.22, and compared with coefficients obtained after factor analysis was employed. As can be seen in Table 5.22, for the Psychological Recession Scale six items were removed, while for the positive HRM practices scale a total of four items were taken away. A total of five items were removed from the original PCQ-24.

Table 5.22: Reliability of measuring scales and their subscales (n=318)

ORIGINAL MEASUREMENT MODEL USED ON THIS SAMPLE			ADAPTED MEASUREMENT MODEL AS USED IN THE PRESENT STUDY		
Instrument/subscale	Cronbach's α	N of items	Instrument/subscale	New Cronbach's α	N of items
Psychological Recession Scale (Total)	0.93	27	Psychological Recession Scale (Total)	0.90	21
Job insecurity, job loss and unemployment	0.77	6	Job insecurity, job loss and unemployment	0.84	7
Work-family conflict	0.88	8	Work-family conflict	0.87	8
Organisational change and psychological uncertainty	0.85	6	Organisational change and psychological uncertainty	0.77	3
Work-related tension and psychological distress	0.83	7	Work-related tension and psychological distress	0.63	3
Positive HRM practices (Total)	0.96	37	Positive HRM practices (Total)	0.96	33
Recognition practices	0.89	6	Recognition-empowerment practices	0.92	9
Empowerment practices	0.91	5	Competence development practices	0.88	6
Competence development practices	0.88	6	Fair rewards practices	0.88	4
Fair rewards practices	0.88	4	Information-sharing practices	0.90	7
Information-sharing practices	0.92	9	Employee wellness practices	0.90	7
Employee wellness practices	0.90	7			
PCQ-24 (Total)	0.92	24	PCQ-24 (Total)	0.94	19
Self-efficacy	0.90	6	Hopeful confidence	0.94	12
Hope	0.90	6			
Resilience	0.69	6	Positive outlook	0.86	7
Optimism	0.39	6			

As a general rule of thumb, a reliability coefficient (r) is considered excellent if r is larger than 0.75, good if r is between 0.40 and 0.75, and poor if r is less than 0.40 (Shoukri & Edge, 1996).

As can be seen in Table 5.22, the majority of scales on both the new and original structures were above the recommended lower limit for Cronbach's alpha of 0.70 (Nunally, 1978). Notably, the Cronbach's alpha coefficients for all three measures exceeded 0.75, indicating excellent internal consistency. The optimism sub-scale, however, obtained the lowest reliability coefficient ($\alpha = 0.39$) on the original PCQ-24 measure. Furthermore, the work-related tension and psychological distress subscale obtained a Cronbach's alpha of 0.63. The reasons for the lower alpha values were attributed to the smaller number of items and the removal of the reversed items.

Although 0.60 is seen by many researchers as "adequate" in exploratory research (Harris, 2012), Malhotra (2007) labels it as an acceptable indicator of reliability. As mentioned earlier, all the measures in this study were adopted from existing scales that were proven to be reliable. Since these scales were used in a new setting, for the first time, Sekaran (2003) recommends that the cut off value should therefore be set at 0.60. Overall, the data collected in this study was found to be reliable.

5.7.2 Validity

Sarantakos (2005) defines validity as the property of a research instrument that measures its relevance, accuracy and precision. Validity will therefore reveal whether an instrument measures what it is supposed to measure, and whether this measurement is accurate and precise. Struwig and Stead (2013) describe different types of validity:

- **Face validity:** A researcher who develops a new measuring instrument should establish whether the questionnaire measures what it claims to measure.
- **Content validity:** The content validity of a test refers to the extent to which the items reflect the theoretical content domain of the construct being measured. Content validity is determined by expert judgement in which the

item domain of a test is compared with a detailed description of the domain of the construct.

- **Criterion-related validity:** The researcher examines the relationship between two or more tests that appear to be similar. Criterion validity consists of predictive validity and concurrent validity:
 - **Predictive validity** is the relationship between the scores of a test (the predictor) with the scores of another test (the criterion).
 - **Concurrent validity** examines the extent to which there is a relationship between the predictor and the criterion
- **Construct validity:** The researcher measures the extent to which a test measures the theoretical construct or abstract variable it was intended to measure. Construct validity tests the meaning of test scores and validates the content and criterion.
- **Convergent and discriminant validity:** The researcher compares the validity of a measure to measures of the same concept that were developed through other methods. Convergent validity is realised when a test is shown to relate reasonably well to other tests that are considered to measure the same or similar constructs.

Validity was achieved in various ways. A qualified statistician evaluated the final version of the questionnaire for investigative bias, conceptual clarity and correct wording of questionnaire items. Validity was also ensured by using scales that were developed and reported in scientific journals and by subjecting the questionnaire for scrutiny by the research supervisor

The following sections provide evidence indicating that the scales used in the present study are operationalizing the construct that it intends to represent, therefore adding confidence in terms of the validity of the scales. Evidence is provided in the form of statistically significant correlations of the measure with other variables that are consistent with theoretically-based expectations.

5.7.2.1 The Job Insecurity Questionnaire (JIQ)

In a research study conducted by Bosman, Buitendach and Laba (2005), the JIQ demonstrated a positive relationship with increased levels of burnout and decreased levels of organisational commitment. The JIQ was also found to hold predictive value regarding exhaustion, cynicism, reduced professional efficacy, as well as reduced normative and affective commitment (Bosman, Buitendach & Laba, 2005).

5.7.2.2 Work-family Conflict Scale

Previous studies, as indicated here, found that the work-family conflict subscale correlated positively with job involvement, work role conflict, work time demands, work role ambiguity, family role conflict, and family time demands.

The scale correlated negatively with social support from work and family, family satisfaction, job and life satisfaction (Adams, King & King, 1996; Carlson & Perrewé, 1999).

5.7.2.3 Organisational change and psychological uncertainty

In a previous study conducted by Poisat and Theron (2014), change-related stress resulting from organisational restructuring correlated positively with psychological contract breach and violation, and destructive employee behaviours such as exit, aggressive voice and neglect.

Furthermore, change-related stress correlated negatively with constructive employee behaviours such as considerate voice and patience, and organisational citizenship behaviours. In a research study by Rafferty and Griffin (2006), the psychological uncertainty scale correlated negatively with leader support and job satisfaction.

5.7.2.4 Work Tension Scale

In previous research studies, job tension correlated positively with work role ambiguity, work role conflict, work role stress, family role stress, work-family conflict, turnover intentions, family distress and poor physical health (Grandey & Cropanzano, 1998; Sanchez & Brock, 1996).

Job tension also correlated negatively with organisational commitment, job satisfaction, self-esteem and age (Grandey & Cropanzano, 1998; Sanchez & Brock, 1996).

5.7.2.5 Positive HRM practices

Parè and Tremblay (2007) found that nonmonetary recognition, competency development, fair rewards and information-sharing practices were negatively and directly related to turnover intention. Procedural justice, affective and continuance commitment and organisational citizenship behaviours partially mediated the effects of HRM practices on the turnover intentions of highly skilled professionals (Parè & Tremblay, 2007).

5.7.2.6 Psychological Capital Questionnaire (PCQ-24)

Görgens-Ekermans and Herbert (2013) investigated the internal validity, reliability and external validity of the PCQ-24. Their results provided evidence of construct and discriminant validity, reliability and significant relationships with external theoretically relevant variables namely stress, burnout and employee engagement (Görgens-Ekermans & Herbert, 2013). The findings also provided sufficient evidence that researchers may confidently use the PCQ-24 to measure the construct of PsyCap in the South African environment.

5.8 ETHICAL CONSIDERATIONS

Anyone who is involved in social research needs to be aware of the general agreements shared by researchers about what is proper and improper in the conduct of scientific inquiry (Babbie, 2010).

Because social researchers transgress the privacy of respondents to observe and study social behaviour, they must take special precautions to protect the respondents' privacy. With regards to the present study, the researcher considered the following ethical issues to reassure respondents that the data would be treated in a confidential and anonymous manner.

5.8.1 Voluntary participation (informed consent)

The researcher depended on the respondents' voluntary cooperation. The cover letter clearly informed respondents that participation was voluntary and outlined the purpose of the study, data collection method and participation needed. Completing the questionnaire signified implicit consent by the respondents.

5.8.2 Permission to conduct the study

Permission to conduct the study was obtained in writing from the West Rand Health District's HR Manager. Annexure C contains the official letter granting the researcher permission to conduct the study.

As indicated earlier, ethical clearance for researching the sample was obtained by firstly applying to Nelson Mandela University's Faculty RTI and secondly, obtaining ethics (human) approval for the research.

The research study commenced only after the University granted permission and issued an ethics number to the researcher (H-15-BES-ACC-021).

5.8.3 Anonymity

Anonymity in a research project is achieved when neither the researchers nor the readers of the findings can identify a given response with a given respondent (Babbie, 2010). Concerning the present study, no specific personal identifying information was requested from respondents.

5.8.4 Confidentiality

Where anonymity protects the identity of specific individuals from being known, confidentiality means that information may have names attached to it, but the researcher holds it in confidence or keeps it secret from the public (Neuman, 2011). Regarding the present study, the research data was held in confidence and information was not released in any way that could link specific employees to specific questionnaires. During the data analysis phase, data was only presented in aggregate form (i.e. percentages, frequencies, charts, tables, etc.).

5.9 CONCLUSION

This chapter explained the research methodology that was used during the study and also provided a quantitative analysis of biographical details of respondents. The research methodology, with special emphasis on questionnaire development and administration, selection of the sample and response rate was discussed. This present study was descriptive, exploratory and explanatory in nature and aimed at determining the relationship between a psychological recession, levels of PsyCap and the effects of positive HR practices on the PsyCap of employees. The empirical study consisted of a self-administered questionnaire survey administered to 450 respondents. A response rate of 71% was obtained. The respondents were mostly female (83%), between the ages of 30 and 39 (33.3%), African (94.3%), and were mostly employed on a permanent basis (80.2%). Most of the respondents were married (45.9%) and employed as professional nurses/CNPs (40.3%).

To prepare the data for inferential statistics and increase its validity, EFA was conducted as presented in this chapter.

Chapter Six presents the analysis, discussion and presentation of results of the present study. These results are interpreted and discussed in light of the research objectives, hypotheses and empirical sub-problems identified in the study.

CHAPTER 6: ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS

6.1	INTRODUCTION	185
6.2	DESCRIPTIVE STATISTICS	186
6.2.1	Section B: Psychological recession	186
6.2.1.1	Section B1: Job insecurity, job loss and unemployment	187
6.2.1.2	Section B2: Work-family conflict	190
6.2.1.3	Section B3: Organisational change and psychological uncertainty 194	
6.2.1.4	Section B4: Work-related tension and psychological distress ...	196
6.2.2	Section C: Positive HRM practices	199
6.2.2.1	Section C1: Recognition practices	200
6.2.2.2	Section C2: Empowerment practices	204
6.2.2.3	Section C3: Competence development practices	207
6.2.2.4	Section C4: Fair rewards practices	210
6.2.2.5	Section C5: Information-sharing practices	213
6.2.2.6	Section C6: Employee wellness practices	216
6.2.3	Section D: PsyCap.....	219
6.2.3.1	Self-efficacy (Items D1.1 – D1.6)	220
6.2.3.2	Hope (Items D1.7 – D1.12)	222
6.2.3.3	Resilience (Items D1.13 – D1.18)	223
6.2.3.4	Optimism (Items D1.19 – D1.24)	224
6.3	INFERENCE STATISTICS AND HYPOTHESIS TESTING	225
6.3.1	Pearson’s product-moment correlation analysis	227
6.3.2	Structural equation modelling	232
6.3.2.1	Testing the theoretical model.....	234
6.3.3	Multiple regression analysis.....	237
6.3.4	One-sample t-test	250
6.4	CONCLUSION	251

LIST OF TABLES

Table 6.1: Descriptive statistics for Section C1: Recognition practices	201
Table 6.2: Means and standard deviations of scores for Section C1: Recognition practices.....	203
Table 6.3: Descriptive statistics for Section C2: Empowerment practices..	205
Table 6.4: Means and standard deviations of scores for Section C2: Empowerment practices	206
Table 6.5: Descriptive statistics for Section C3: Competence development practices.....	208
Table 6.6: Means and standard deviations of scores for Section C3: Competence development practices	209
Table 6.7: Descriptive statistics for Section C4: Fair rewards practices.....	211
Table 6.8: Means and standard deviations of scores for Section C4: Fair rewards practices	212
Table 6.9: Descriptive statistics for Section C5: Information-sharing practices	214
Table 6.10: Means and standard deviations of scores for Section C5: Information-sharing practices.....	215
Table 6.11: Descriptive statistics for Section C6: Employee wellness practices	217
Table 6.12: Means and standard deviations of scores for Section C6: Employee wellness practices.....	218
Table 6.13: Means and standard deviations of scores for Section D: Dimensions of PsyCap and total PsyCap	220
Table 6.14: Frequency distribution for the dimensions of PsyCap and Total PsyCap	220
Table 6.15: Hypotheses formulated for Pearson's product-moment correlation analysis	228
Table 6.16: Correlations between psychological recession and PsyCap....	229
Table 6.17: Correlations between positive HRM practices and PsyCap	231
Table 6.18: Correlations between positive HRM practices and psychological recession	232

Table 6.19: Fit indices for the theoretical model.....	235
Table 6.20: Standardised regression weights of path model	236
Table 6.21: Multiple regression analysis: The influence of psychological recession on PsyCap	238
Table 6.22: Multiple regression analysis: The influence of psychological recession factors on PsyCap factors.....	239
Table 6.23: Multiple regression analysis: The influence of HRM practices on PsyCap	241
Table 6.24: Multiple regression analysis: The influence of HRM practices on PsyCap factors.....	243
Table 6.25: Multiple regression analysis: The influence of HRM practices on psychological recession	246
Table 6.26: Multiple regression analysis: The influence of HRM practices on four psychological recession factors	247
Table 6.27: One-sample t-tests: Factors (n = 318; d.f. = 317)	250

LIST OF FIGURES

Figure 6.1: Refined Conceptual Model.....	226
Figure 6.2: Structural equations model	235
Figure 6.3: Diagram illustrating hypothesis 2	237
Figure 6.4: Diagram illustrating hypotheses 3 and 4	241
Figure 6.5: Diagram illustrating hypothesis 5	245

LIST OF CHARTS

Chart 6.1: Responses according to Section C1: Recognition practices	200
Chart 6.2: Responses according to Section C2: Empowerment practices (n=318).....	204
Chart 6.3: Responses according to Section C3: Competence development practices (n=318).....	207
Chart 6.4: Responses according to Section C4: Fair rewards practices (n=318).....	210

Chart 6.5: Responses according to Section C5: Information-sharing practices (n=318)	213
Chart 6.6: Responses according to Section C6: Employee wellness practices (n=318)	216
Chart 6.7: Responses to items D1.1 – D1.6 (Self-efficacy)	221
Chart 6.8: Responses to items D1.7 – D1.12 (Hope).....	222
Chart 6.9: Responses to items D1.13 – D1.18 (Resilience)	223
Chart 6.10: Responses to items D1.19 – D1.24 (Optimism)	224

LIST OF INFOGRAPHICS

Infographic 6.1: Perceptions of job insecurity, job loss and unemployment (n=318).....	188
Infographic 6.2: Perceptions of work-family conflict (n=318).....	191
Infographic 6.3: Perceptions of organisational change and psychological uncertainty (n = 318)	194
Infographic 6.4: Perceptions of work-related tension and psychological distress (n=318)	197

CHAPTER 6: ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS

6.1 INTRODUCTION

In Chapter Five, the research methodology that was followed in this study was presented, described and justified. The technical details of the study were also discussed to demonstrate that sound and professional research principles and practices were relied upon in completing the empirical component of the project. The biographical data collected from Section A of the questionnaire was also presented and discussed.

The purpose of Chapter Six is to analyse, interpret, and discuss the data that was obtained from the empirical study. The empirical findings of the research project, the data analysis and interpretation of results provide answers to the following empirical sub-problems:

- **Sub-problem one:** To what extent is the target group experiencing the negative consequences associated with a psychological recession, including job insecurity, job loss and unemployment, organisational change and psychological uncertainty, work-family conflict, and work-related tension and psychological distress?
- **Sub-problem two:** What is the impact of a psychological recession on the target groups' PsyCap, and specifically their hope, self-efficacy, resilience, and optimism?
- **Sub-problem three:** To what extent do selected HRM practices foster the development of the target groups' PsyCap?
- **Sub-problem four:** Which bundle of HRM practices positively influences the development of the target groups' PsyCap during a psychological recession?
- **Sub-problem five:** Do HRM practices buffer negative experiences of a psychological recession?

The research findings are organised in tabular and graphic form in the same order as the questions appear in the research questionnaire.

Data was processed and results generated by using the Statistical Package for Social Sciences (SPSS) version 24 software (IBM Corp., 2016). Dr. Jacques Pietersen, a statistician from the Unit for Statistical Consultation at Nelson Mandela University, assisted with the processing and analysis of the survey data. Parasuraman, Grewal and Krishnan (2004) state that the accuracy of data should be verified in terms of trustworthiness and relevance. To instil more confidence in the research results, the questionnaire data was checked for asymmetrical distributions, omissions, incorrectly entered data, and scores with extreme values.

The results of the descriptive analysis are presented first, followed by the inferential statistical analysis. The presentation of the inferential statistics is aimed at addressing the hypotheses generated from the main problem, sub-problems and objectives of the study.

6.2 DESCRIPTIVE STATISTICS

According to Russo (2003), descriptive statistics aim to extract useful information from unorganised data. In the present study, the descriptive data included frequency scores and measures of central tendency and dispersion of selected variables. The response options to Sections B, C, and D of the questionnaire were based on a Likert-type scale format, and respondents were required to indicate whether they strongly agreed (5), agreed (4), were uncertain (3), disagreed (2) or strongly disagreed (1) with the statements. Numerical values, ranging from five to one were used to describe and summarise the various data sets. The descriptive statistics of the results from Sections B, C, and D are presented and discussed below.

6.2.1 Section B: Psychological recession

Section B of the questionnaire required respondents to indicate the extent to which they experienced the negative consequences associated with a psychological recession.

As mentioned in Chapter Five, the Psychological Recession Scale incorporated the following subscales:

- Job insecurity, job loss and unemployment (Section B1)
- Work-family conflict (Section B2)
- Organisational change and psychological uncertainty (Section B3)
- Work-related tension and psychological distress (Section B4)

To visually demonstrate the extent to which respondents experienced the negative consequences associated with a psychological recession, infographics were used to represent the descriptive statistics for scores obtained to the subscales in Section B. These infographics were created with Piktochart (Piktochart Infographics, 2017). The infographics used in this study consist of basically three colours: red, grey and green. Dark red represents strongly disagree, red disagree, grey neutral, green agree and dark green strongly agree.

6.2.1.1 Section B1: Job insecurity, job loss and unemployment

Infographic 6.1 reflects the variables used to measure respondents' perceptions of job insecurity, job loss and unemployment. According to Infographic 6.1, more than half of the respondents (with percentages varying between 51% and 65%) strongly agreed/agreed that:

- They expected to continue in their current job for a long time (56% strongly agree/agree)
- Their chance of becoming unemployed was very small (54% strongly agree/agree)
- Their job environment was stable and they knew what to expect in terms of their job (65% strongly agree/agree)
- Their organisation was well enough established to provide them with the necessary job security (51% strongly agree/agree)
- Their job was safe even if the economy was unstable (53% strongly agree/agree)

Infographic 6.1 also provides the result for the last item in this scale which measured the extent to which the respondents felt they had a low possibility of retrenchment. In this respect, 63% of the respondents strongly agreed/agreed that the chances of them being retrenched were "very low".

"I expect to continue in my current job for a long time."

■ Strongly Disagree (14.80%)
 ■ Disagree (13.20%)
 ■ Neutral (16%)
 ■ Agree (19.50%)
■ Strongly Agree (36.50%)



"The chance that I will become unemployed is very small."

■ Strongly Disagree (16.40%)
 ■ Disagree (8.70%)
 ■ Neutral (21.40%)
 ■ Agree (21.40%)
■ Strongly Agree (32.10%)

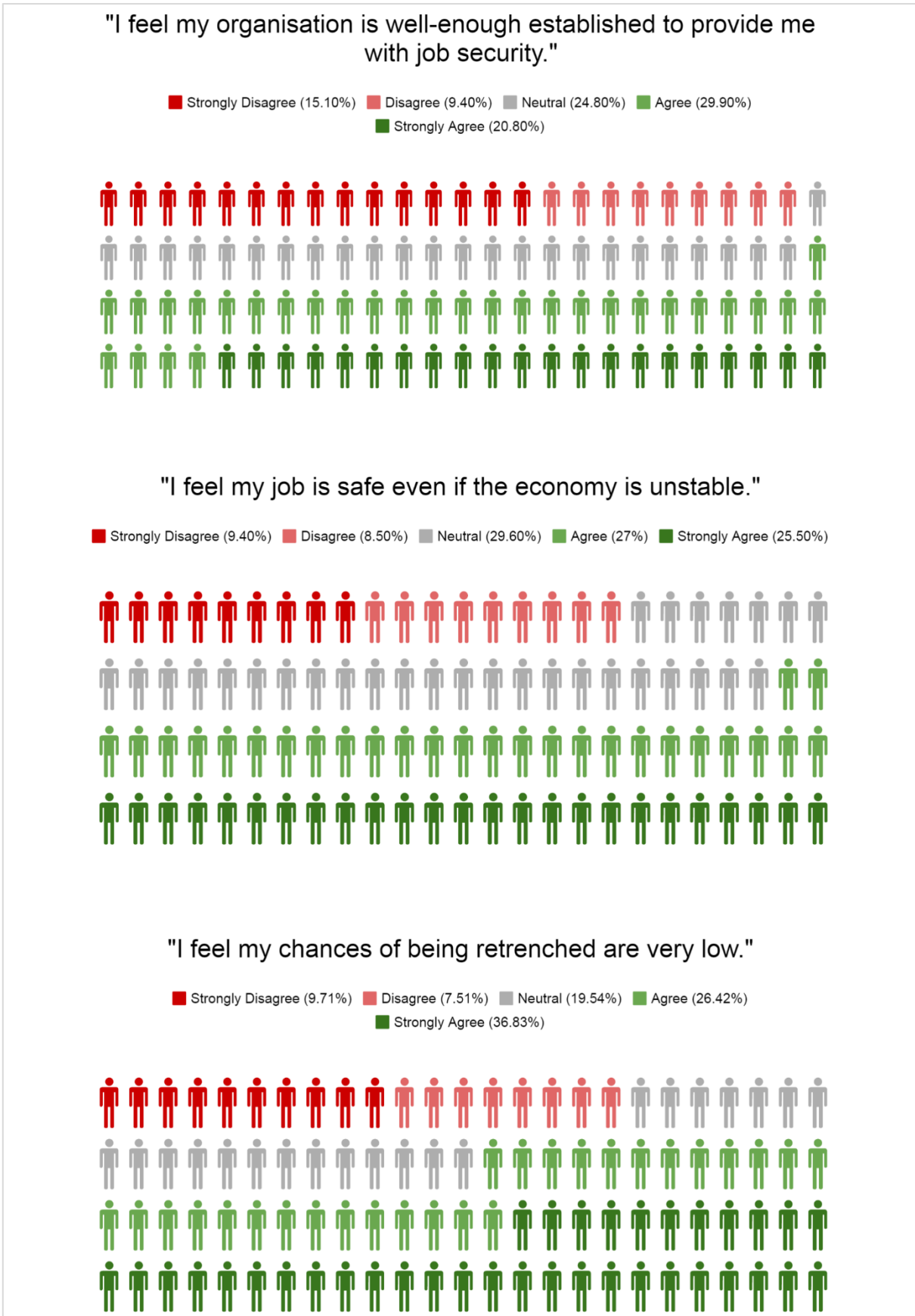


"My job environment is stable and I know what to expect in terms of my job."

■ Strongly Disagree (9.10%)
 ■ Disagree (12.30%)
 ■ Neutral (13.80%)
 ■ Agree (32.40%)
■ Strongly Agree (32.40%)



Infographic 6.1: Perceptions of job insecurity, job loss and unemployment (n=318)



Infographic 6.1 (continued): Perceptions of job insecurity, job loss and unemployment (n=318)

It is therefore evident that, based on the combined strongly disagree/disagree responses to Section B1, 17% to 28% of the respondents indicated personal exposure and vulnerability regarding job insecurity, job loss and unemployment. At the same time, neutral responses varied between 13.8% and 29.6% which indicates a degree of uncertainty about future employment.

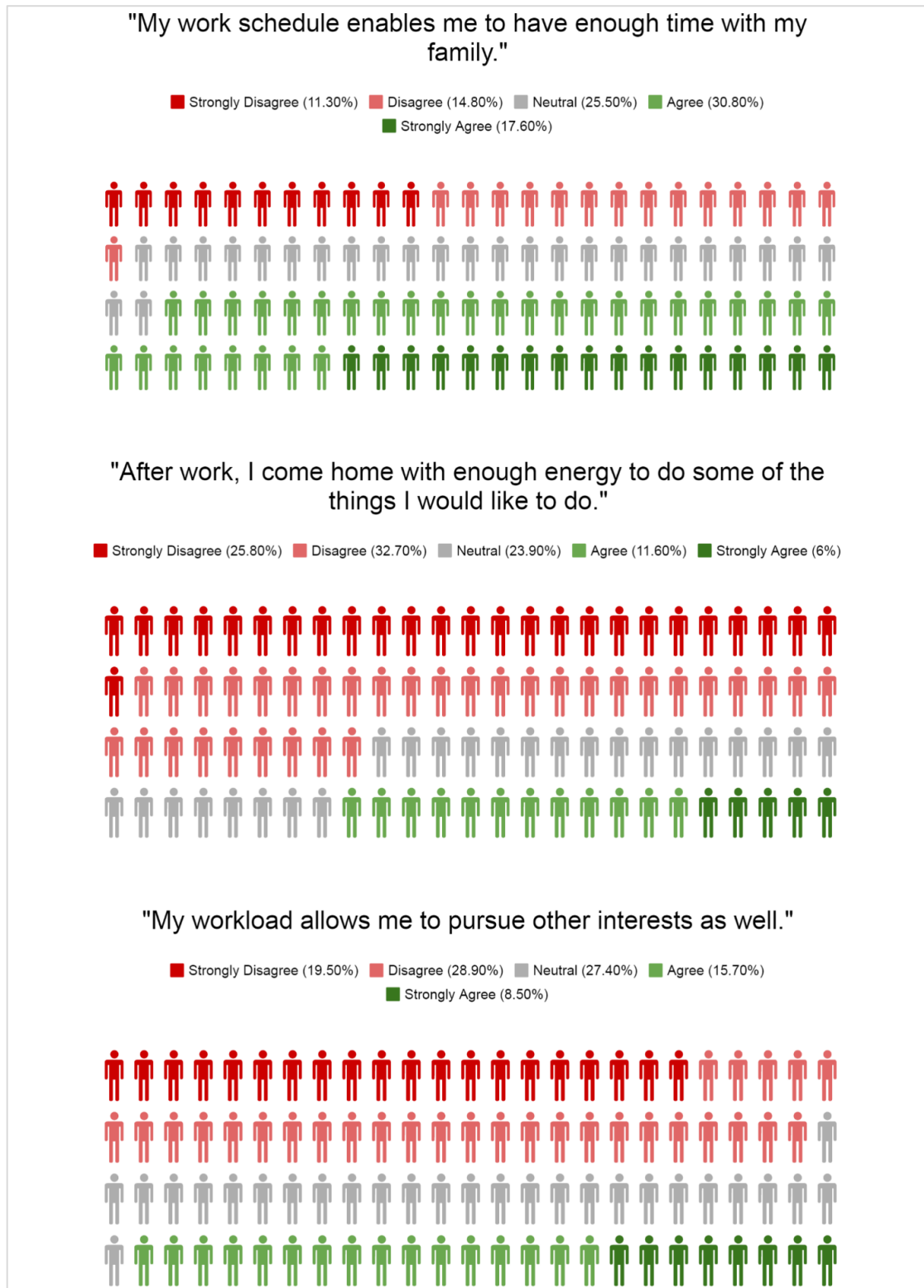
Several research studies have indicated that in both developing and developed countries, perceptions of job security tend to be higher in government jobs, education and health-care sectors, in comparison to private sector jobs (Mafini & Dlodlo, 2014; Turnley, Bolino, Lester & Bloodgood, 2003). This finding is relevant to this study that was conducted in the South African public health sector, a sector that is regarded as important for meeting the basic health needs of South Africans and therefore receives a relative large allocation of government funding (Van Rensburg, 2014). Furthermore, some authors have stated that even during the Great Recession of 2007-2009, government jobs were more secure than private sector jobs (Curry, 2011; Kittle, 2012). For example, in a study by Kopelman and Rosen (2015), it was found that the advantage to being employed in the public sector widens during recessions, and that public sector employees were less likely to lose their jobs than private-sector employees during non-recession years.

6.2.1.2 Section B2: Work-family conflict

Work-family conflict is considered rife in the South African public health care sector, as health care workers (especially those serving in public health facilities) have to shoulder the impact of a rapidly increasing disease burden in the general population, growing patient numbers, and high workloads, which may infringe on family and leisure periods (Van Rensburg, 2014).

Infographic 6.2 presents the responses received on the work-family conflict subscale. Responses to this subscale were dispersed across the Likert scale, while still showing a tendency towards strongly agree/agree. For example, 48% of respondents agreed/strongly agreed that their work schedules enabled them to have enough time with their families, while 42% strongly agreed/agreed that their families were supportive of them when they chose to work from home.

Furthermore, 57% of respondents strongly agreed/agreed that although their work was demanding, they managed to stay in a pleasant mood when they were at home.



Infographic 6.2: Perceptions of work-family conflict (n=318)

"My family is supportive of me when I choose to work at home."

■ Strongly Disagree (13.20%)
 ■ Disagree (15.40%)
 ■ Neutral (29.60%)
 ■ Agree (25.80%)
■ Strongly Agree (16%)



"Although my work is demanding, I manage to stay in a pleasant mood when I am at home."

■ Strongly Disagree (8.79%)
 ■ Disagree (13.19%)
 ■ Neutral (20.78%)
 ■ Agree (36.46%)
■ Strongly Agree (20.78%)

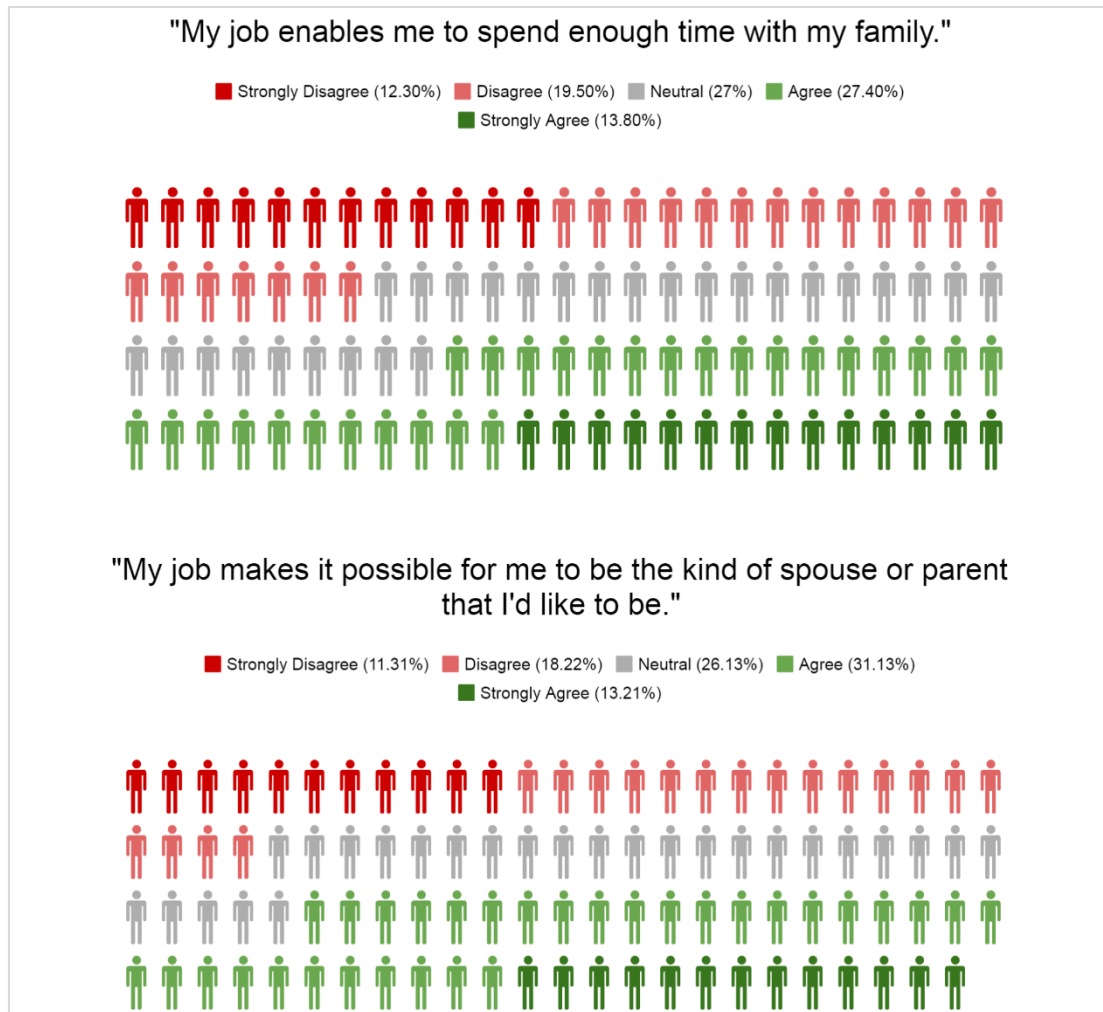


"The demands of my job is at a level that enables me to relax when I am at home."

■ Strongly Disagree (12.91%)
 ■ Disagree (19.82%)
 ■ Neutral (31.43%)
 ■ Agree (23.62%)
■ Strongly Agree (12.21%)



Infographic 6.2 (continued): Perceptions of work-family conflict (n=318)



Infographic 6.2 (continued): Perceptions of work-family conflict (n=318)

However, 59% of the respondents strongly disagreed/disagreed that they came home after work with enough energy to do some of the things they wanted to do. In addition, almost half of the respondents (48%) strongly disagreed/disagreed that their workload allowed them to pursue other interests as well.

This finding highlights the negative impact of mounting workloads within South Africa's PHC sector on respondents' work-family experiences, as South African PHC facilities are plagued by high vacancy rates, critical staff shortages and growing workloads due to huge demands for care that is exacerbated by the HIV/AIDS epidemic (Van Rensburg, 2014).

6.2.1.3 Section B3: Organisational change and psychological uncertainty

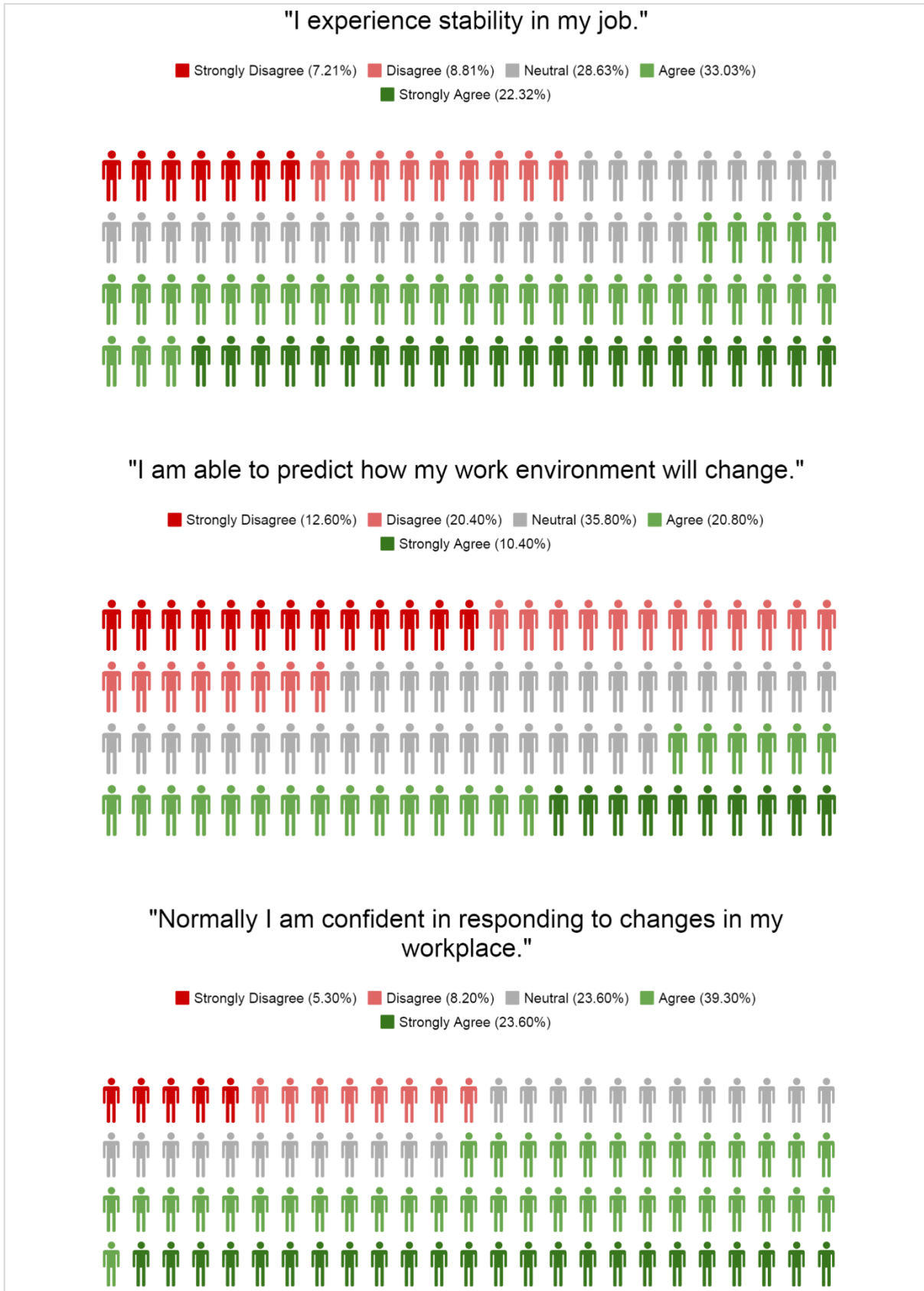
As can be observed from Infographic 6.3, most of the respondents strongly agreed/agreed (55%) that their organisation had a good track record of retaining people rather than retrenching them.

Infographic 6.3 further shows that most of the respondents strongly agreed/agreed that they:

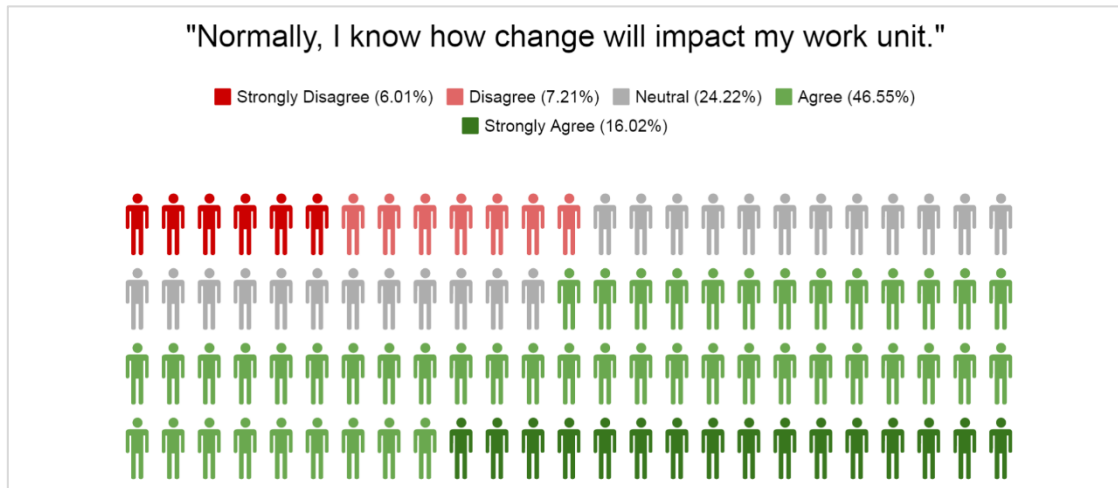
- Perceived their organisation as relatively stable (58%)
- Experienced stability in their jobs (55%)
- Were confident in responding to changes in their work environment (63%)
- Knew how change would impact their work unit (63%)



Infographic 6.3: Perceptions of organisational change and psychological uncertainty (n = 318)



Infographic 6.3 (continued): Perceptions of organisational change and psychological uncertainty (n=318)



Infographic 6.3 (continued): Perceptions of organisational change and psychological uncertainty (n=318)

Based on the preceding discussion, it is therefore evident that between 13% and 33% of the respondents experienced a relatively low level of personal exposure and vulnerability relating to organisational change and psychological uncertainty. However, the number of neutral responses, ranging between 24% and 36% indicates a degree of psychological uncertainty which is specifically echoed by a 35% neutral response for the item related to the respondents' ability to predict how their work environment will change.

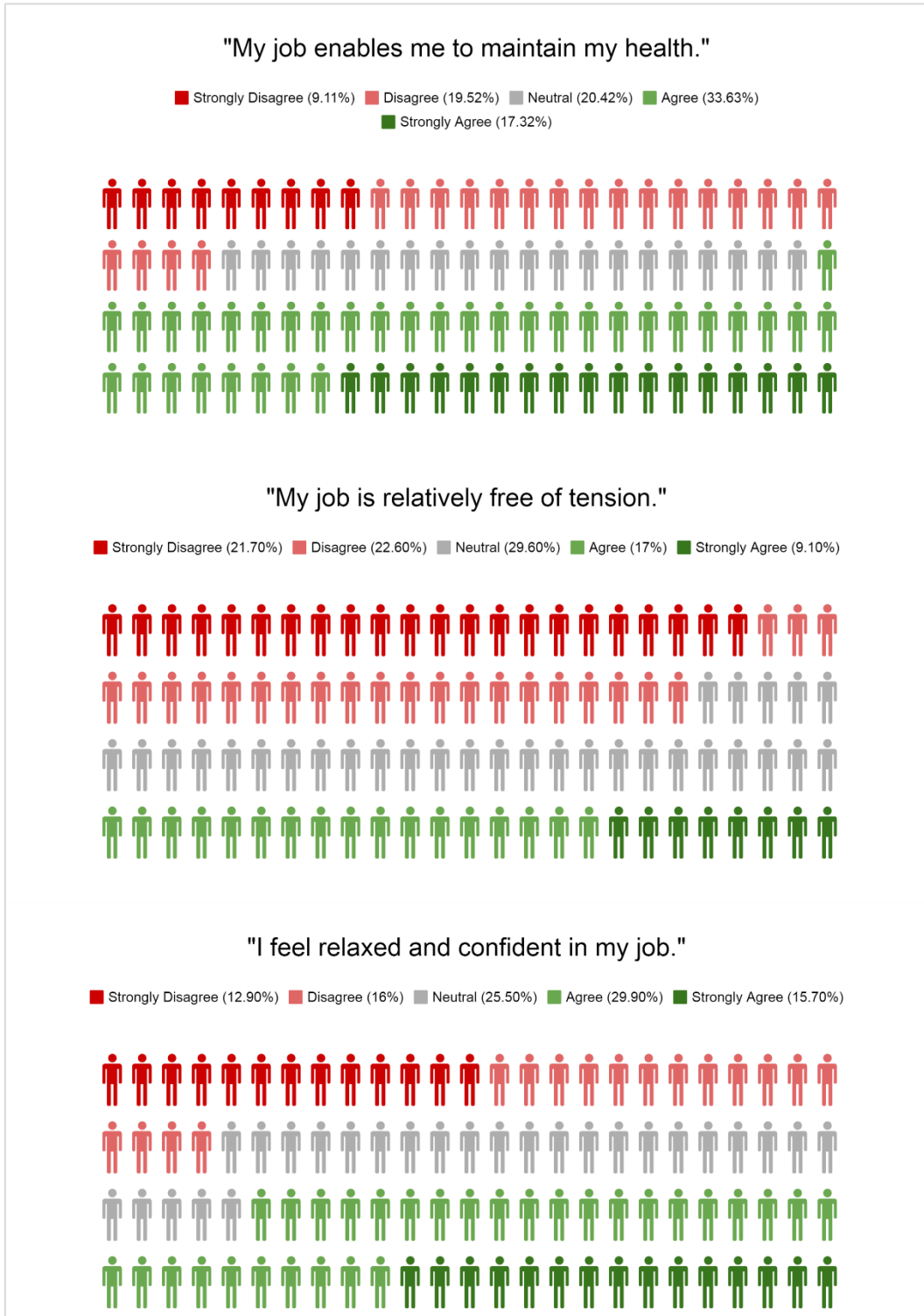
6.2.1.4 Section B4: Work-related tension and psychological distress

In terms of the information presented in Infographic 6.4, slightly more than half of the respondents (51%) strongly agreed/agreed that their jobs enabled them to maintain their health. Most of the respondents (46%) strongly agreed/agreed that they felt relaxed and confident in their jobs, and a further 48% of the respondents indicated that they felt relaxed when they had to attend meetings in the company.

In addition to the above findings, mostly strongly disagree/disagree responses indicate that the respondents felt that:

- Their jobs were relatively free of tension (44% strongly disagreed/disagreed)
- Should they have taken up a different job, the level of their health would most likely stayed the same and not improve (37% strongly disagreed/disagreed)

- They slept well at night without worrying about problems associated with their jobs (42% strongly disagreed/disagreed)
- When they were at home and busy doing other things, they did not think about their jobs (44% strongly disagreed/disagreed)



Infographic 6.4: Perceptions of work-related tension and psychological distress (n=318)

"Should I take up a different job, the level of my health will most likely stay the same and not improve."

■ Strongly Disagree (12.90%)
 ■ Disagree (24.50%)
 ■ Neutral (34.90%)
 ■ Agree (20.80%)
■ Strongly Agree (6.90%)



"I sleep well at night without worrying about problems associated with my job."

■ Strongly Disagree (19.20%)
 ■ Disagree (23%)
 ■ Neutral (22.60%)
 ■ Agree (20.40%)
■ Strongly Agree (14.80%)

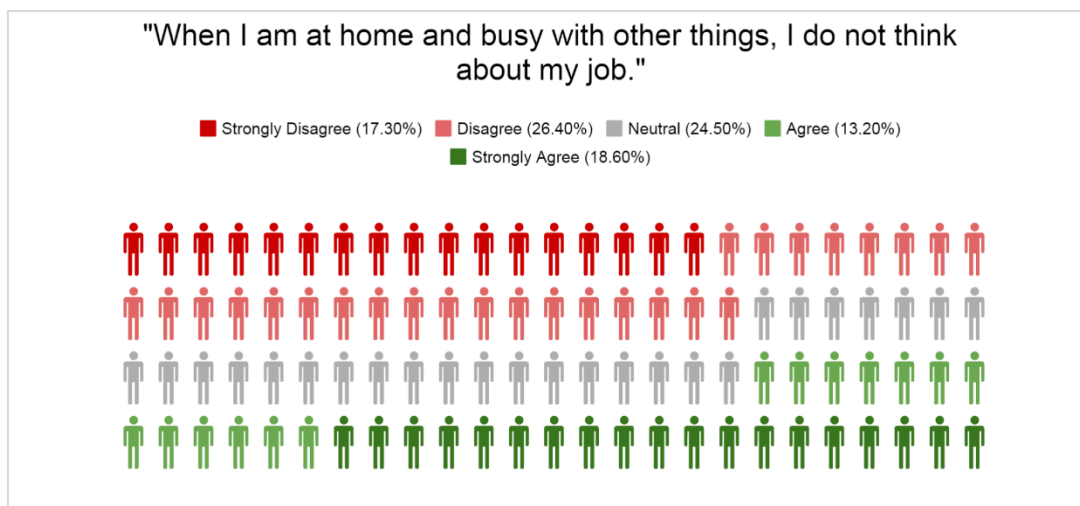


"I feel relaxed when I have to attend meetings in the company."

■ Strongly Disagree (12.60%)
 ■ Disagree (14.80%)
 ■ Neutral (24.80%)
 ■ Agree (30.80%)
■ Strongly Agree (17%)



Infographic 6.4 (continued): Perceptions of work-related tension and psychological distress (n=318)



Infographic 6.4 (continued): Perceptions of work-related tension and psychological distress (n=318)

Neutral responses varying between 20% and 35% could indicate fluctuation between work-related tension and psychological distress, and feelings of well-being.

The above findings indicate that between 37% and 44% of the respondents experienced a relatively high level of work-related tension and psychological distress. Regarding the South African PHC context, job stress has been found to be high amongst South African HRH due to excessive overtime work, dealing with crisis situations, heavy workloads, insufficient human resources and unsatisfactory working environments (Van Rensburg, 2014).

6.2.2 Section C: Positive HRM practices

Section C of the questionnaire measured respondents' evaluations of their organisation's positive HRM practices.

As mentioned in Chapter Five, the positive HRM practices scale incorporated the following six sub-scales:

- Recognition practices (Section C1; Items C1.1 – C1.6)
- Empowerment practices (Section C2; Items C2.1 – C2.5)
- Competence development practices (Section C3; Items C3.1 – C3.6)
- Fair rewards practices (Section C4; Items C4.1 – C4.4)

- Information-sharing practices (Section C5; Items C5.1 – C5.9)
- Employee wellness practices (Section C6; Items C6.1 – C6.7)

As indicated, the above subscales were measured on a Likert-type rating scale ranging from strongly disagree (1) to strongly agree (5), a score of one suggesting negative evaluations and/or perceptions of the particular HRM practice, and a score of five suggesting positive evaluations and/or perceptions.

The descriptive statistics for scores on positive HRM practices and the related subscales are presented and discussed in the following section.

6.2.2.1 Section C1: Recognition practices

Section C1 required of the respondents to evaluate their organisation's recognition practices. As already indicated in Chapter Five, recognition practices enhance employee motivation and include efforts by the organisation to carefully consider employees' suggestions, appreciate quality work and achievements (Parè & Tremblay, 2007). Chart 6.1 illustrates the responses relating to recognition practices. It is evident from Chart 6.1 that the responses varied across the Likert scale while still showing a trend towards strongly disagree/disagree, except for the item "When employees do quality work it is appreciated by colleagues", which showed a tendency towards agree/strongly agree.

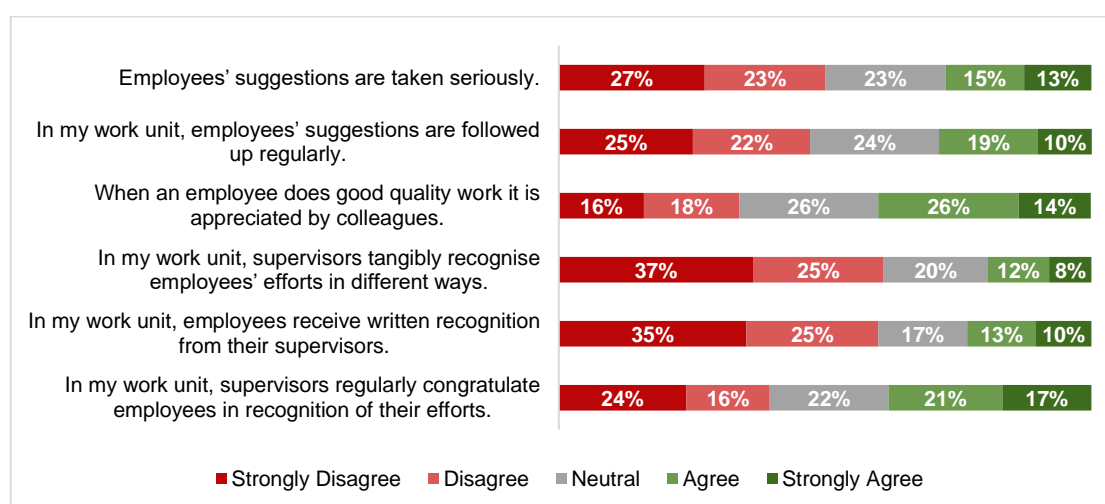


Chart 6.1: Responses according to Section C1: Recognition practices

Predominantly strongly disagree/disagree responses indicate the following observations by the respondents:

- Employees' suggestions were taken seriously (50% strongly disagree/disagree)
- In their work unit, employees' suggestions were followed up regularly (47% strongly disagree/disagree)
- In their work unit, supervisors tangibly recognised employees' efforts in different ways (62% strongly disagree/disagree)
- In their work unit, employees received written recognition from their supervisors (60% strongly disagree/disagree)
- In their work unit, supervisors regularly congratulated employees in recognition of their efforts (40% strongly disagree/disagree)

As already indicated in section 6.2.2.1, the recognition practices sub-scale was measured on a rating scale of one to five, with a score of one suggesting negative evaluations/perceptions and a score of five suggesting positive evaluations/perceptions of the particular HRM practice. For ease of interpretation, the mean scores were categorised into ranges and charted against the following scoring key:

- **1.00 – 2.60** (Negative perceptions/evaluations)
- **2.61 – 3.40** (Neutral perceptions/evaluations)
- **3.41 – 5.00** (Positive perceptions/evaluations)

The descriptive statistics for scores on recognition practices are shown in Table 6.1.

Table 6.1: Descriptive statistics for Section C1: Recognition practices

Scoring key	RECOGNITION PRACTICES	
	Frequency	%
Negative (1.00 – 2.60)	158	50%
Neutral (2.61 – 3.40)	82	26%
Positive (3.41 – 5.00)	78	25%
Total	318	100%

Table 6.1 shows that a large proportion of the respondents (50%) negatively evaluated/perceived their organisation's recognition practices, while only 25% of respondents had positive evaluations/perceptions. These findings indicate that the majority of respondents perceived that their organisations did not carefully consider their suggestions, or appreciated quality work and their achievements. The means and standard deviations of scores for Section C1 are shown in Table 6.2. An analysis of the means and standard deviations (SD) of the variables in Section C1 reveal an aggregate mean of 2.65. This indicates a tendency towards neutral responses regarding recognition practices. As shown in Table 6.2, the lowest mean scores were obtained for the item "In my work unit, supervisors tangibly recognise employees' efforts in different ways" (mean 2.30 and SD 1.28) and for the item "In my work unit, employees receive written recognition from their supervisors" (mean 2.38 and SD 1.35). The highest mean score was obtained for the item "When an employee does good quality work it is appreciated by colleagues" (mean 3.03 and SD 1.28). According to the HRH Strategy for the Health Sector (2012/13 – 2016/17), PHC facilities should provide a "total employment offering" that focuses on the following areas pertaining to employee recognition (National Department of Health, 2011):

- Creating a sense of adding value (e.g. listening to employees' suggestions, providing employees with stretch goals, allowing accountability and appropriate decision-making opportunities for employees).
- Creating a conducive social environment (e.g. networking opportunities, two-way communication and consultation, and employee recognition).

Rewarding employees for outstanding job performance encourages them to improve their productivity and quality of work. Employee recognition programmes, if properly constructed, are invaluable tools for communicating not only goals, job expectations, and performance standards, but also values such as organisational commitment, employee responsibility, and teamwork (Ganesh, Panday & Karodia, 2014). The mostly negative and neutral responses in this section cast doubt on whether recognition was provided or the goals of recognition attained.

Table 6.2: Means and standard deviations of scores for Section C1: Recognition practices

Code	Questionnaire item	N	Mean	SD
C1.1	Employees' suggestions are taken seriously.	318	2.63	1.36
C1.2	In my work unit, employees' suggestions are followed up regularly.	318	2.66	1.31
C1.3	When an employee does good quality work it is appreciated by colleagues.	318	3.03	1.28
C1.4	In my work unit, supervisors tangibly recognise employees' efforts in different ways.	318	2.30	1.28
C1.5	In my work unit, employees receive written recognition from their supervisors.	318	2.38	1.35
C1.6	In my work unit, supervisors regularly congratulate employees in recognition of their efforts.	318	2.91	1.41
Recognition practices (Total)		318	2.65	1.07

6.2.2.2 Section C2: Empowerment practices

Section C2 required of the respondents to evaluate their organisation's empowerment practices. The responses to these items are presented in Chart 6.2 and Table 6.3. As mentioned in Chapter Five, empowerment practices allow employees to enjoy increased autonomy when they perform their jobs (Parè & Tremblay, 2007). According to Chart 6.2, 41% of the respondents indicated that employees were given the right to make decisions about their work, while 30% strongly disagreed/disagreed with this item. Forty-five per cent of the respondents strongly agreed/agreed with the item "Employees are encouraged to self-manage and self-lead". Interestingly, 40% neutral responses were obtained for the item "Employees in my work unit have much autonomy in how they manage projects." This high number of neutral responses may be due to the strict standard operating procedures and protocols that healthcare workers are required to follow when they perform their duties.

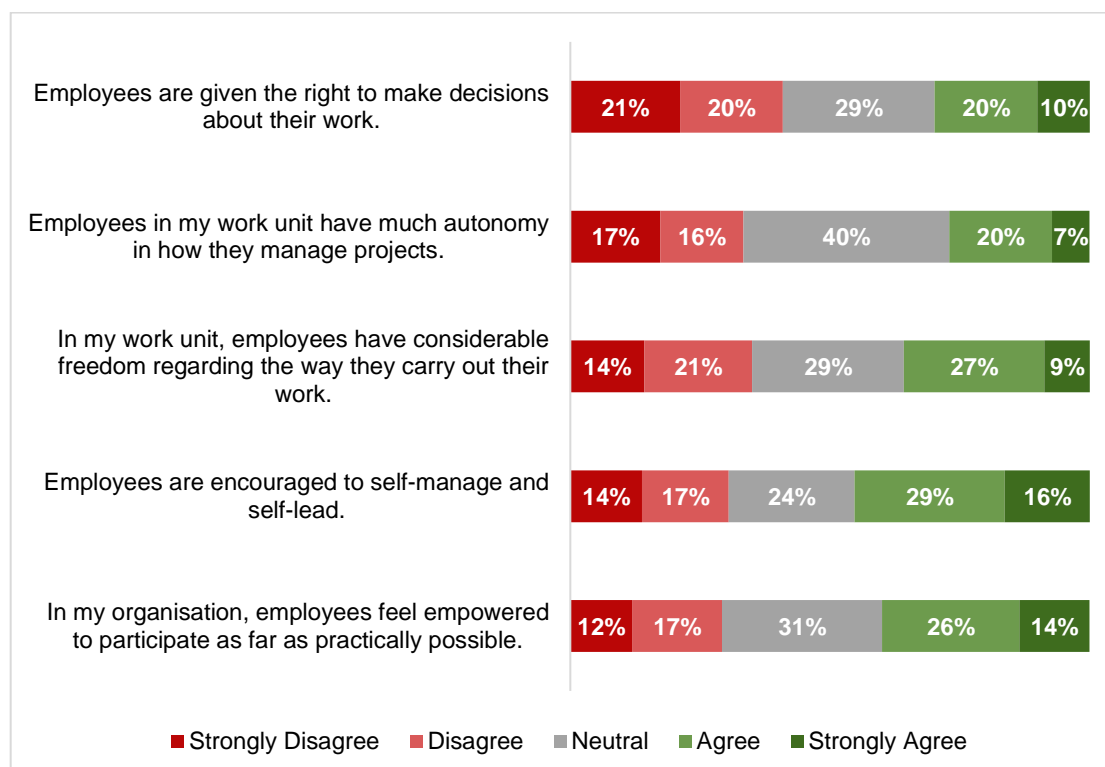


Chart 6.2: Responses according to Section C2: Empowerment practices (n=318)

The descriptive statistics for scores for empowerment practices are shown in Table 6.3. As already indicated, Section C2 (empowerment practices) was measured on a scale of one to five, with one suggesting negative evaluations/perceptions of the organisation's empowerment practices and five suggesting positive evaluations/perceptions of the organisation's empowerment practices. For ease of interpretation, the mean scores were categorised into the same ranges as specified in section 6.2.2.1:

- **1.00 – 2.60** (Negative perceptions/evaluations)
- **2.61 – 3.40** (Neutral perceptions/evaluations)
- **3.41 – 5.00** (Positive perceptions/evaluations)

Table 6.3: Descriptive statistics for Section C2: Empowerment practices

Scoring key	EMPOWERMENT PRACTICES	
	Frequency	%
Negative (1.00 – 2.60)	94	30%
Neutral (2.61 – 3.40)	124	39%
Positive (3.41 – 5.00)	100	31%
Total	318	100%

Table 6.3 indicates that 30% of the respondents negatively evaluated/perceived their organisation's empowerment practices, while 31% gave positive evaluations. A large percentage of responses were neutral (39%). These findings indicate that responses for empowerment practices were relatively spread between the three categories. The means and standard deviations of scores for Section C2 are shown in Table 6.4. An analysis of the mean and standard deviation of the variables in Table 6.4 reveal an aggregate mean of 2.97, indicating a tendency towards neutral responses. The standard deviation for this sub-scale ranges from 1.15 to 1.28 indicating some variation in responses to this section. The item "Employees are given the right to make decisions about their work" obtained the lowest mean (2.78), while the item "Employees are encouraged to self-manage and self-lead" obtained the highest mean (3.17).

Table 6.4: Means and standard deviations of scores for Section C2: Empowerment practices

Code	Questionnaire item	N	Mean	SD
C2.1	Employees are given the right to make decisions about their work.	318	2.78	1.26
C2.2	Employees in my work unit have much autonomy in how they manage projects.	318	2.84	1.15
C2.3	In my work unit, employees have considerable freedom regarding the way they carry out their work.	318	2.96	1.18
C2.4	Employees are encouraged to self-manage and self-lead.	318	3.17	1.28
C2.5	In my organisation, employees feel empowered to participate as far as practically possible.	318	3.12	1.20
Empowerment practices (Total)		318	2.97	1.04

6.2.2.3 Section C3: Competence development practices

This section required respondents to evaluate their organisation's competence development practices. Respondents strongly agreed/agreed that:

- Employees can develop their skills to increase their chances of being promoted (43% strongly agree/agree)
- Employees can rotate jobs to develop their skills (40% strongly agree/agree)
- Several professional development activities are offered to employees to improve their skills and knowledge (48% strongly agree/agree)
- Proficiency courses and professional certifications are encouraged by management (42% strongly agree/agree)
- Employees are able to apply newly learned skills in their work (51% strongly agree/agree)
- Managers encourage employees to apply newly learned abilities and skills in the context of their daily work (49% strongly agree/agree)

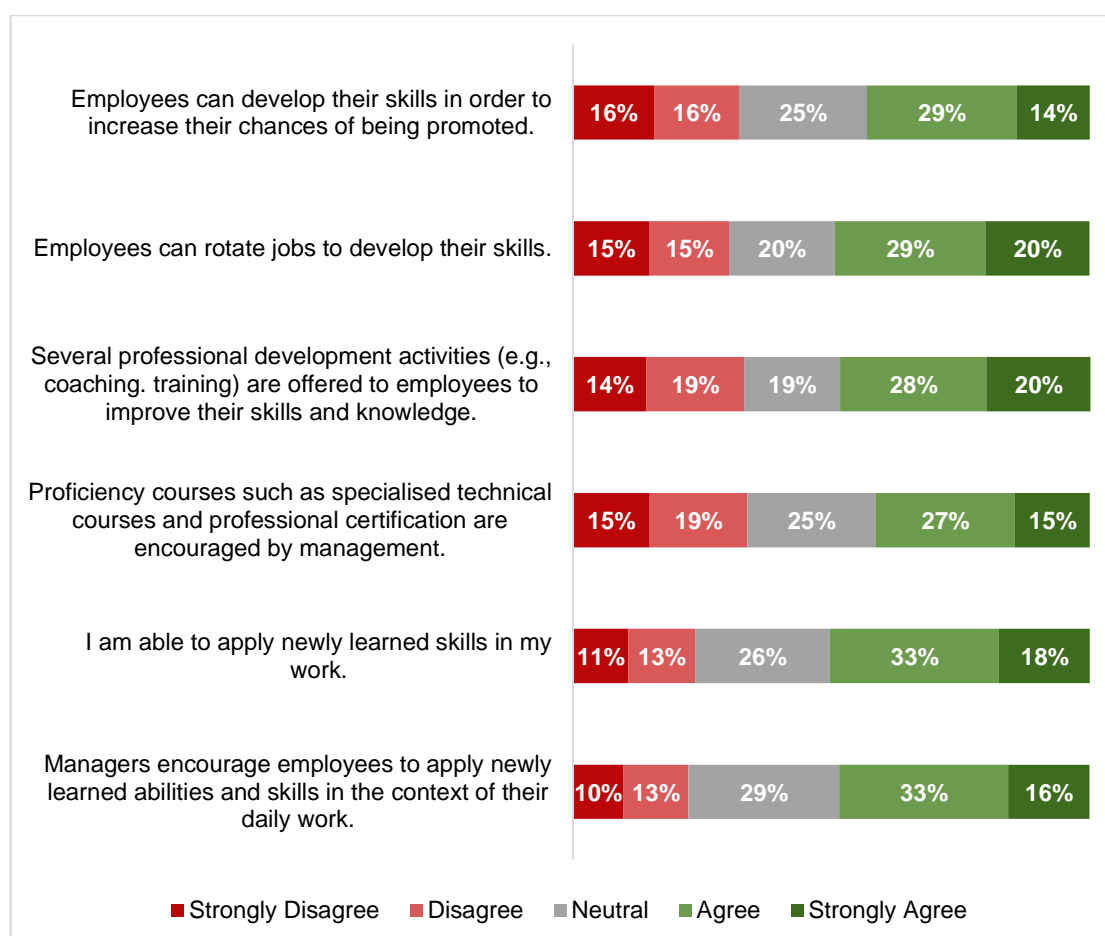


Chart 6.3: Responses according to Section C3: Competence development practices (n=318)

The descriptive statistics for scores on competence development practices are shown in Table 6.5. As with the previous subscales, the mean scores were categorised into ranges and charted against the scoring key presented in section 6.2.2.1.

Table 6.5: Descriptive statistics for Section C3: Competence development practices

Scoring key	COMPETENCE DEVELOPMENT PRACTICES	
	Frequency	%
Negative (1.00 – 2.60)	84	26%
Neutral (2.61 – 3.40)	85	27%
Positive (3.41 – 5.00)	149	47%
Total	318	100%

According to the data presented in Table 6.5, it is evident that almost half of the respondents reported positive evaluations/perceptions of their organisation's competence development practices (47%), while 26% of the evaluations were negative. It is evident that though almost half of the respondents felt that their organisation invested in their growth and development through various interventions and programmes, the other half felt different.

The means and standard deviations of scores for Section C3 are presented in Table 6.6. An analysis of the mean and standard deviation of the variables reveal an aggregate mean score of 3.21. This indicates a tendency toward being uncertain/neutral.

The lowest mean scores were obtained for the item "Proficiency courses such as specialised technical courses and professional certification are encouraged by management" (mean 3.08 and SD 1.28) and the item "Employees can develop their skills to increase their chances of being promoted" (mean 3.09 and SD 1.28). The standard deviation ranges between 1.17 and 1.34, and indicate some variance in the responses to this scale.

Table 6.6: Means and standard deviations of scores for Section C3: Competence development practices

Code	Questionnaire item	N	Mean	SD
C3.1	Employees can develop their skills in order to increase their chances of being promoted.	318	3.09	1.28
C3.2	Employees can rotate jobs to develop their skills.	318	3.25	1.34
C3.3	Several professional development activities (e.g., coaching, training) are offered to employees to improve their skills and knowledge.	318	3.21	1.34
C3.4	Proficiency courses such as specialised technical courses and professional certification are encouraged by management.	318	3.08	1.28
C3.5	I am able to apply newly learned skills in my work.	318	3.34	1.22
C3.6	Managers encourage employees to apply newly learned abilities and skills in the context of their daily work.	318	3.32	1.17
Competence development practices (Total)		318	3.21	1.00

6.2.2.4 Section C4: Fair rewards practices

Section C4 of the questionnaire required of the respondents to evaluate their organisation's rewards practices in terms of fairness. Relating to equitable rewards, Chart 6.4 shows that the majority of respondents (59%) did not perceive their salary as competitive for the industry (i.e. external equity), or fair in comparison to individuals in the organisation doing similar work (i.e. internal equity). Regarding increases/bonuses based on individual performance, 51% of respondents indicated that the pay increases/bonuses they received in the last two years did not adequately reflect their performance.

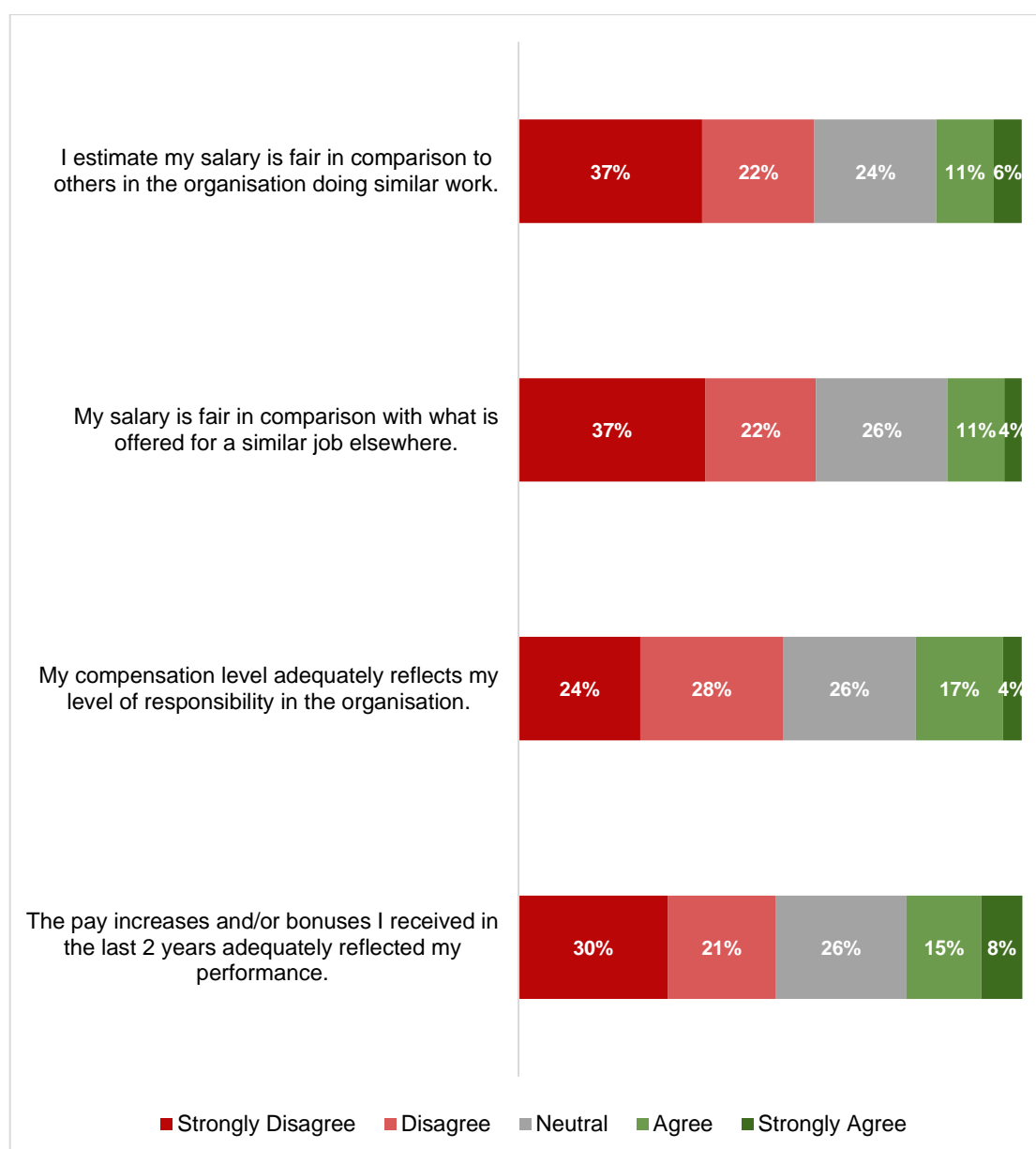


Chart 6.4: Responses according to Section C4: Fair rewards practices (n=318)

Table 6.7 shows the descriptive statistics for scores on fair rewards practices.

As can be seen in Table 6.7, more than half of the respondents (59%) appeared to have negative evaluations/perceptions of their organisation's rewards practices, while only 18% of respondents reported positive evaluations of these practices.

Table 6.7: Descriptive statistics for Section C4: Fair rewards practices

Scoring key	FAIR REWARDS PRACTICES	
	Frequency	%
Negative (1.00 – 2.60)	187	59%
Neutral (2.61 – 3.40)	73	23%
Positive (3.41 – 5.00)	58	18%
Total	318	100%

In summary, the results as presented above are indicative of the respondents tending to have negative perceptions/evaluations of their organisation's reward practices. This is also evident in the analysis of the means and standard deviations presented in Table 6.8 which reveal an aggregate mean of 2.38. The lowest mean scores were obtained for the item "My salary is fair in comparison with what is offered for a similar job elsewhere" (mean 2.22 and SD 1.16) and the item "I estimate my salary is fair in comparison to others in the organisation doing similar work" (mean 2.27 and SD 1.22).

The low agreement with these items could be based on the nature of the South African public health sector, as employees' dissatisfaction with pay largely contributes to the migration of South Africa's HRH into the private sector and overseas and high staff turnover (National Department of Health, 2011). In a study conducted by Magana and Damons (2013), a correlation between remuneration and the wellbeing of PHC employees was found. The majority of employees agreed that remuneration and working conditions needed to be improved (Magana & Damons, 2013).

Table 6.8: Means and standard deviations of scores for Section C4: Fair rewards practices

Code	Questionnaire item	N	Mean	SD
C4.1	I estimate my salary is fair in comparison to others in the organisation doing similar work.	318	2.27	1.22
C4.2	My salary is fair in comparison with what is offered for a similar job elsewhere.	318	2.22	1.16
C4.3	My compensation level adequately reflects my level of responsibility in the organisation.	318	2.48	1.14
C4.4	The pay increases and/or bonuses I received in the last 2 years adequately reflected my performance.	318	2.51	1.28
Fair rewards practices (Total)		318	2.38	1.03

6.2.2.5 Section C5: Information-sharing practices

It is evident from Chart 6.5 that the responses to this subscale were varied. Strongly agree/agree responses for all the items in this scale ranged from 18% to 50% with the highest agree/strongly agree responses for the items “Employees are regularly informed of their work unit’s performance” (50% strongly agree/agree), “Managers regularly inform employees of the level of customer satisfaction for products or services offered” (49% strongly agree/agree), “Employees are regularly informed of the criteria that will be included in their performance evaluation” (47% strongly agree/agree), and “Employees are regularly informed of new products and/or services” (49% strongly agree/agree). However, respondents strongly disagreed/disagreed that:

- Employees were regularly informed about future corporate projects (50% strongly disagree/disagree)
- Employees were regularly informed of financial results (60% strongly disagree/disagree)
- Employees’ suggestions were followed up (45% strongly disagree/disagree)

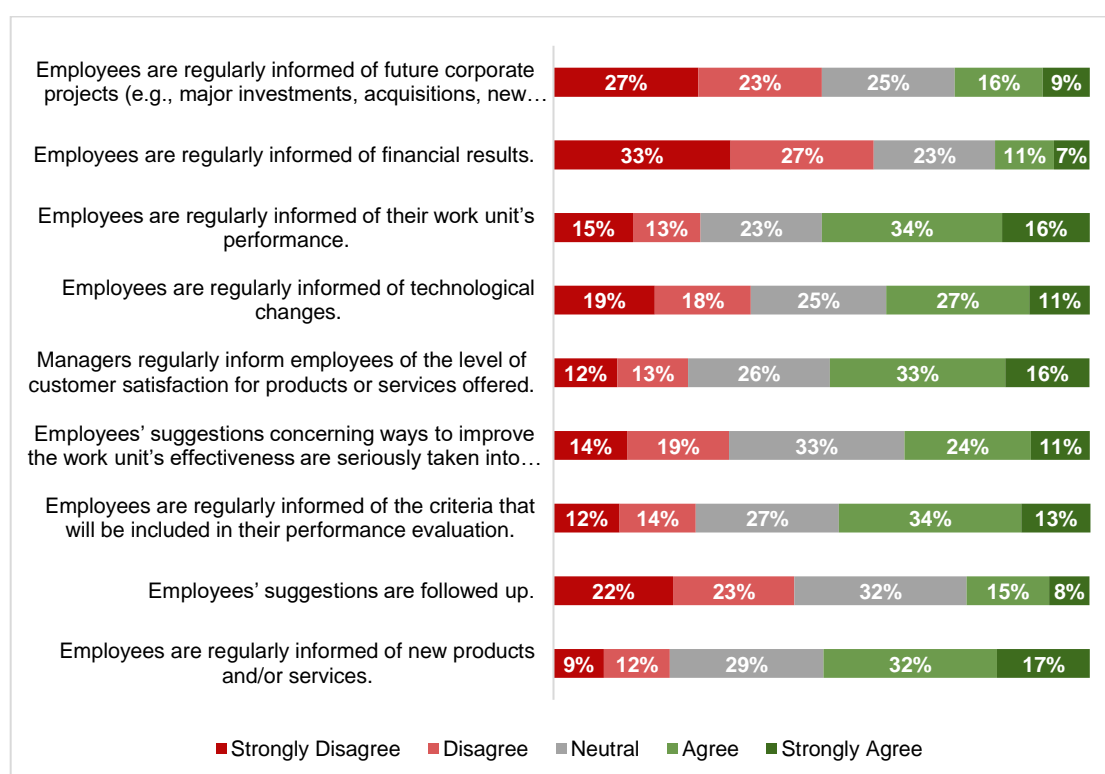


Chart 6.5: Responses according to Section C5: Information-sharing practices (n=318)

The descriptive statistics for scores on information-sharing practices are presented in Table 6.9.

Table 6.9 indicates that most respondents had negative evaluations/perceptions of their organisation's information-sharing practices (35%), while 34% of the respondents had positive evaluations/perceptions. These findings indicate that responses for this subscale were mostly spread across the three categories.

Table 6.9: Descriptive statistics for Section C5: Information-sharing practices

Scoring key	INFORMATION-SHARING PRACTICES	
	Frequency	%
Negative (1.00 – 2.60)	110	35%
Neutral (2.61 – 3.40)	101	32%
Positive (3.41 – 5.00)	107	34%
Total	318	100%

The means and standard deviations for responses to information-sharing practices are presented in Table 6.10. An analysis of the means and standard deviations of the variables in Table 6.8 suggests a tendency toward neutral evaluations of the organisation's information-sharing practices. The standard deviation varied between 1.18 and 1.29 showing some variation in terms of how the respondents responded to these questionnaire items.

In summary, the above findings indicate that most respondents felt that their organisations did not share information on aspects such as financial performance, operational measures and the organisation's strategy. As mentioned in Chapter Five, it is important to note that information-sharing practices convey to employees that their organisation (represented by managers) trusts and wants to engage with them (Parè & Tremblay, 2007). Information-sharing practices contribute to a sense of belonging, effective work distribution and organising and improving quality (Gandolfi, 2008; Messersmith, Patel, Lepak & Gould-Williams, 2011; Roche, Teague, Coughlan & Fahy, 2011).

Table 6.10: Means and standard deviations of scores for Section C5: Information-sharing practices

Code	Questionnaire item	N	Mean	SD
C5.1	Employees are regularly informed of future corporate projects (e.g., major investments, acquisitions, new technologies).	318	2.57	1.28
C5.2	Employees are regularly informed of financial results.	318	2.31	1.22
C5.3	Employees are regularly informed of their work unit's performance.	318	3.24	1.29
C5.4	Employees are regularly informed of technological changes.	318	2.94	1.29
C5.5	Managers regularly inform employees of the level of customer satisfaction for products or services offered.	318	3.27	1.22
C5.6	Employees' suggestions concerning ways to improve the work unit's effectiveness are seriously taken into account.	318	2.99	1.19
C5.7	Employees are regularly informed of the criteria that will be included in their performance evaluation.	318	3.21	1.20
C5.8	Employees' suggestions are followed up.	318	2.63	1.20
C5.9	Employees are regularly informed of new products and/or services.	318	3.36	1.18
Information-sharing practices (Total)		318	2.95	0.96

6.2.2.6 Section C6: Employee wellness practices

Relating to employee wellness practices, Chart 6.6 shows that the responses for this subscale were spread across the scale. Strongly agree/agree responses were given for the following items, indicating that the respondents observed that the organisation:

- Supports the promotion of health within the workplace (50% strongly agree/agree)
- Offers employees health education classes, workshops, lectures and special events on a regular basis (46% strongly agree/agree)
- Offers health screening services (52% strongly agree/agree)
- Participates in an employee assistance programme (44% strongly agree/agree)

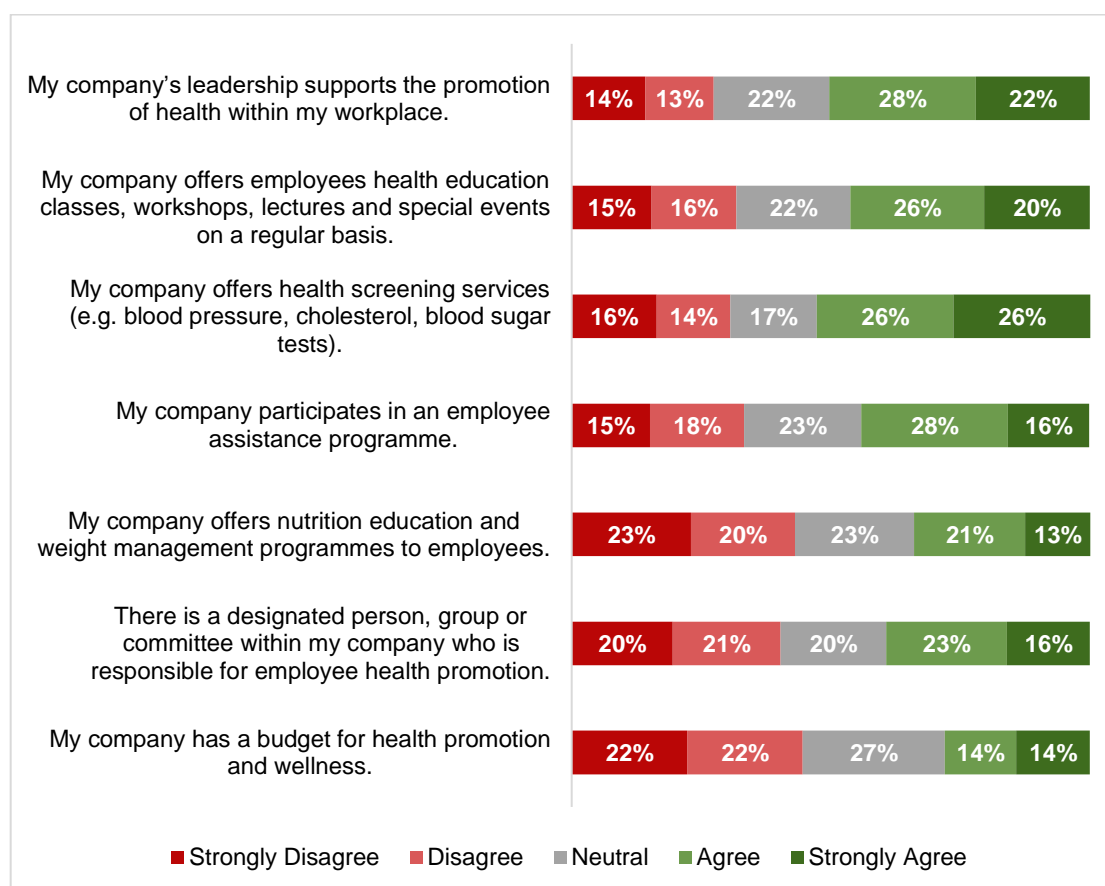


Chart 6.6: Responses according to Section C6: Employee wellness practices (n=318)

Neutral responses varied between 17% and 27% indicating uncertainty, or alternatively, that these wellness practices were only offered to a certain extent.

Chart 6.6 further shows that respondents strongly disagreed/disagreed that their organisation:

- Offers nutrition education and weight management programmes to employees (43% strongly disagree/disagree)
- Has a designated person, group or committee within the organisation who is responsible for employee health promotion (41% strongly disagree/disagree)
- Has a budget in place for health promotion and wellness (44% strongly disagree/disagree)

The descriptive statistics for scores on employee wellness practices are presented in Table 6.11. As can be seen from Table 6.11, 41% of the respondents appeared to have positive perceptions/evaluations of their organisation's employee wellness practices, while 35% of the responses were in the negative category. A quarter of the responses fell into the neutral category.

Table 6.11: Descriptive statistics for Section C6: Employee wellness practices

Scoring key	EMPLOYEE WELLNESS PRACTICES	
	Frequency	%
Negative (1.00 – 2.60)	110	35%
Neutral (2.61 – 3.40)	78	25%
Positive (3.41 – 5.00)	130	41%
Total	318	100%

Table 6.12 shows the means and standard deviations of scores for employee wellness practices adopted as perceived by the respondents. An analysis of the means and standard deviations of the variables presented in Table 6.12 reveals an aggregate mean of 3.07 and an aggregate standard deviation of 1.07. The spread of the standard deviation (ranging between 1.30 and 1.42) indicates variation in the responses on employee wellness practices adopted by their organisation.

Table 6.12: Means and standard deviations of scores for Section C6: Employee wellness practices

Code	Questionnaire item	N	Mean	SD
C6.1	My company's leadership supports the promotion of health within my workplace.	318	3.31	1.33
C6.2	My company offers employees health education classes, workshops, lectures and special events on a regular basis.	318	3.19	1.35
C6.3	My company offers health screening services (e.g. blood pressure, cholesterol, blood sugar tests).	318	3.32	1.42
C6.4	My company participates in an employee assistance programme.	318	3.11	1.30
C6.5	My company offers nutrition education and weight management programmes to employees.	318	2.81	1.34
C6.6	There is a designated person, group or committee within my company who is responsible for employee health promotion.	318	2.96	1.37
C6.7	My company has a budget for health promotion and wellness.	318	2.75	1.33
Employee wellness practices (Total)		318	3.07	1.07

The variable “My company has a budget for health promotion and wellness” obtained the lowest mean (2.75) and a standard deviation of 1.33, while the variable “My company offers health screening services (e.g. blood pressure, cholesterol, blood sugar tests)” obtained the highest mean (3.32).

The above findings are also consistent with previous studies, showing that the South African health sector operates without adequate and sound HRM practices (Lehmann, Van Damme, Barben & Sanders, 2009; Longmore & Ronnie, 2014). The effective application of HRM practices is crucial to achieve the South African HRH strategy for the health sector, which is to improve access to health care and improve health outcomes (National Department of Health, 2011). Furthermore, sound management of health care workers is critical for the functioning of a healthcare system (Longmore & Ronnie, 2014).

The descriptive statistics for scores on PsyCap and its subscales are presented and discussed in the following section.

6.2.3 Section D: PsyCap

Section D of the questionnaire measured the respondents’ levels of PsyCap. As mentioned in Chapter Five, the PCQ-24 measured the following dimensions of PsyCap:

- Self-efficacy (Items D1.1 – D1.6)
- Hope (Items D1.7 – D1.12)
- Resilience (Items D1.13 – D1.18)
- Optimism (Items D1.19 – D1.24)

PsyCap was measured on a Likert rating scale ranging from strongly disagree (1) to strongly agree (5). For ease of interpretation, the mean scores were calculated and plotted against the following scoring key to indicate the level of PsyCap:

- **1.00 – 2.60** (Low score)
- **2.61 – 3.40** (Medium score)
- **3.41 – 5.00** (High score)

Table 6.13 shows the descriptive statistics (mean scores and standard deviations) for each dimension of PsyCap. As can be seen in Table 6.13, the mean score for the total PsyCap scale (3.54) falls into the high range suggesting that, on average, the respondents revealed high levels of PsyCap. Further to this, the mean scores for the four PsyCap dimensions were also high, ranging between 3.44 and 3.69.

Table 6.13: Means and standard deviations of scores for Section D: Dimensions of PsyCap and total PsyCap

PsyCap dimension	Mean	Standard deviation	Skewness	Kurtosis
Self-efficacy	3.57	0.91	-0.832	0.572
Hope	3.69	0.90	-0.988	0.927
Resilience	3.47	0.75	-0.341	-0.047
Optimism	3.44	0.56	-0.381	0.700
Total PsyCap	3.54	0.67	-0.924	1.081

The frequency distribution for PsyCap was also calculated, as can be seen in Table 6.14. The majority of the respondents scored high on total PsyCap (69%), as well as on the dimensions of PsyCap namely self-efficacy (66%), hope (71%), resilience (55%), and optimism (57%).

Table 6.14: Frequency distribution for the dimensions of PsyCap and Total PsyCap

Scoring key	Self-efficacy		Hope		Resilience		Optimism		PsyCap	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Low	43	14%	36	11%	38	12%	24	8%	33	11%
Medium	64	20%	56	18%	106	33%	114	36%	65	20%
High	211	66%	226	71%	174	55%	180	57%	220	69%
Total	318	100%	318	100%	318	100%	318	100%	318	100%

6.2.3.1 Self-efficacy (Items D1.1 – D1.6)

An examination of Chart 6.7 indicates a high degree of positive responses for items related to self-efficacy.

It is evident that 72% of the respondents indicated that they felt confident presenting information to a group of colleagues, whereas 63% of the respondents indicated that they felt confident helping to set targets/goals within their work area. These findings indicate that respondents revealed that they had the necessary confidence to take on challenging tasks and put in the necessary effort to succeed (Luthans, Youssef & Avolio, 2007).

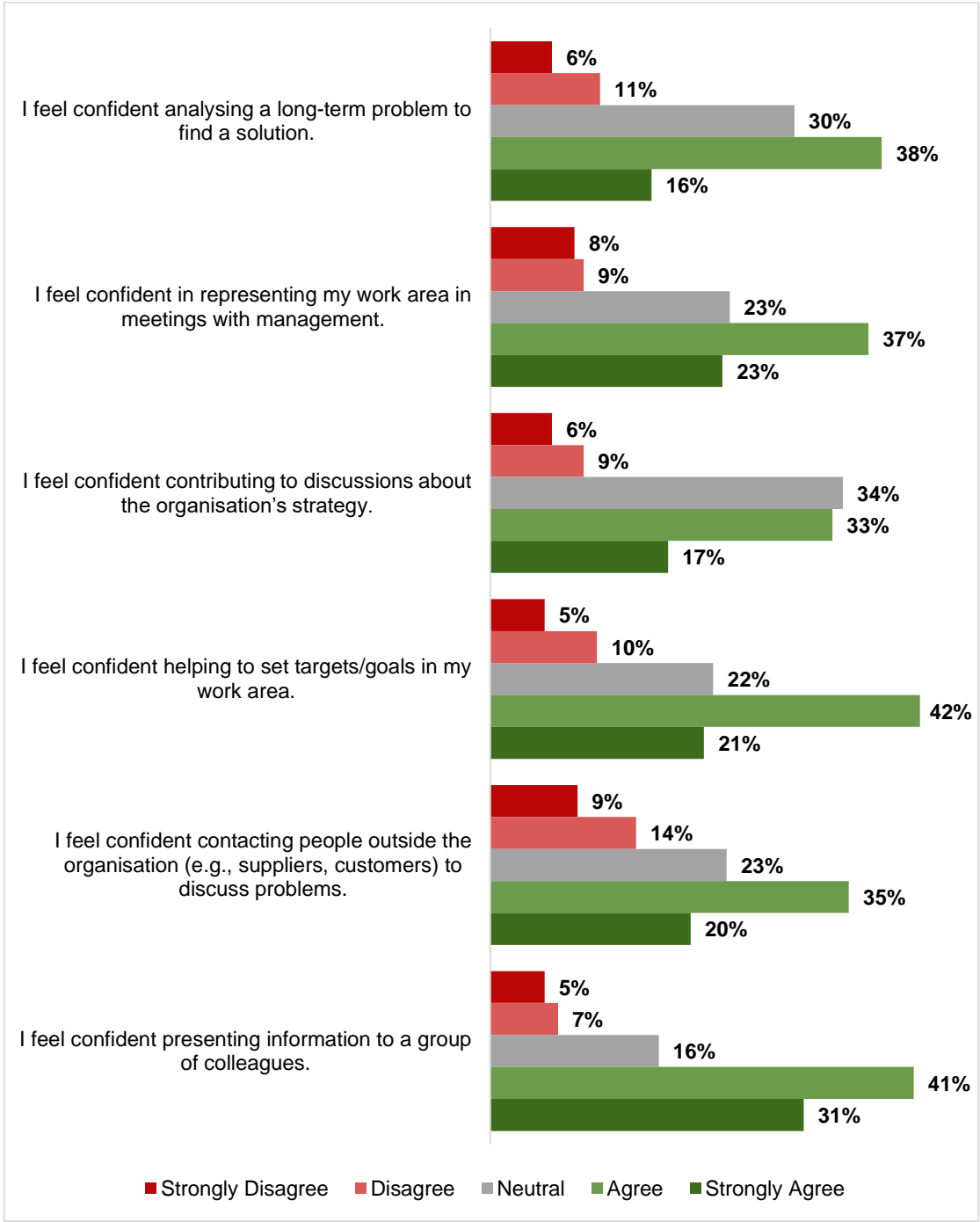


Chart 6.7: Responses to items D1.1 – D1.6 (Self-efficacy)

6.2.3.2 Hope (Items D1.7 – D1.12)

An assessment of Chart 6.8 reveals a significant number of positive responses for items related to hope. The majority of the respondents indicated that they energetically pursued their work goals (71%), whereas 68% of respondents indicated that they could think of many ways to reach their current work goals. In addition to the above findings, a further 71% of the respondents strongly agreed/agreed with the item “I believe there are lots of ways around any problem.”

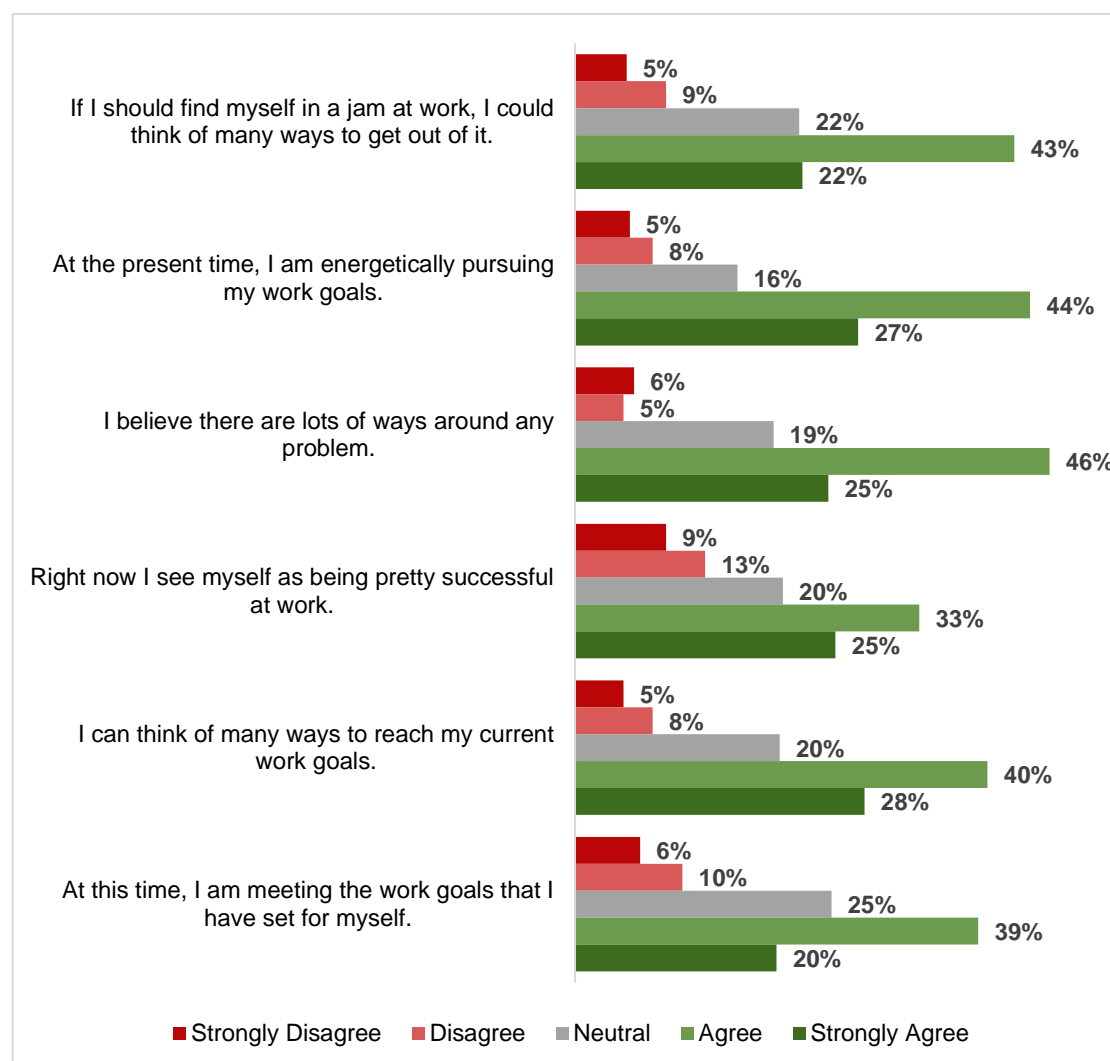


Chart 6.8: Responses to items D1.7 – D1.12 (Hope)

The above findings indicate that the majority of respondents indicated that they persevered toward their goals and redirected their paths to achieve their goals, critical behaviours related to hope as highlighted by Luthans, Youssef and Avolio, 2007.

6.2.3.3 Resilience (Items D1.13 – D1.18)

Chart 6.9 indicates that 66% of the respondents indicated that they usually managed difficulties at work one way or another. Furthermore, 64% of the respondents strongly agreed/agreed with the item “I can be “on my own”, so to speak, at work if I have to”. These results indicate that when respondents were experiencing challenges at work, they had the capacity to independently bounce back to ensure success. However, even though the responses reflect that the respondents were confident in their ability to deal with challenging work situations, their responses show that they had less confidence in taking stress in their stride or recovering from setbacks at work and moving on.

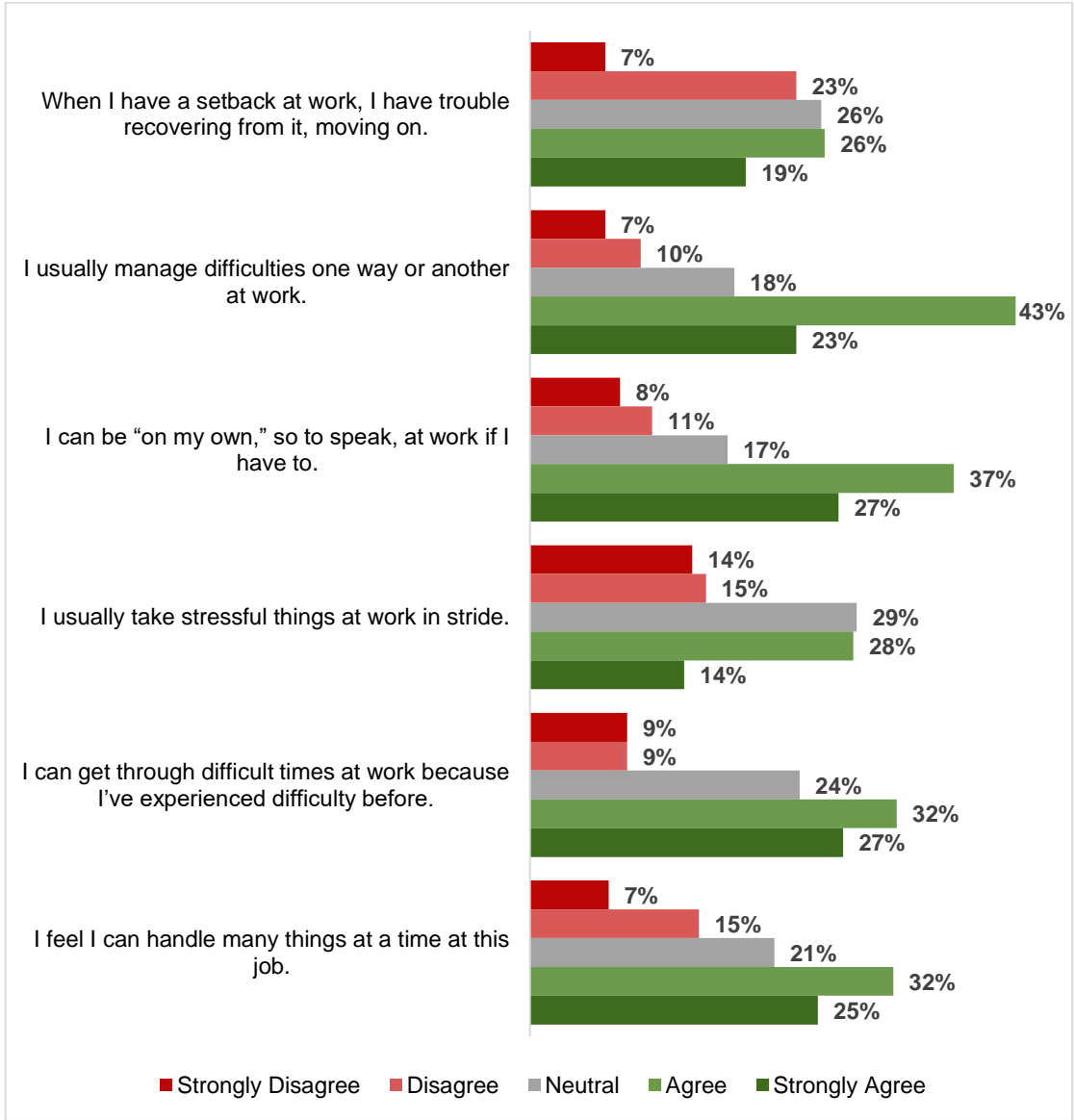


Chart 6.9: Responses to items D1.13 – D1.18 (Resilience)

6.2.3.4 Optimism (Items D1.19 – D1.24)

Chart 6.10 indicates a significant number of positive responses for items related to optimism. For example, 71% of the respondents indicated that they always looked on the bright side of things regarding their job, whereas 63% strongly agreed/agreed with the item “I’m optimistic about what will happen to me in the future as it pertains to work”. Lastly, 63% of the respondents indicated that they approached their jobs as if “every cloud has a silver lining.” Responses to the two negative statements show that, despite the fact that the respondents felt optimistic, the responses also reflect perceptions of uncertainty with regard to the probability that things could go wrong work wise, and whether things worked out the way the respondent wanted. Nevertheless, the responses reflect mostly a perception of optimism.

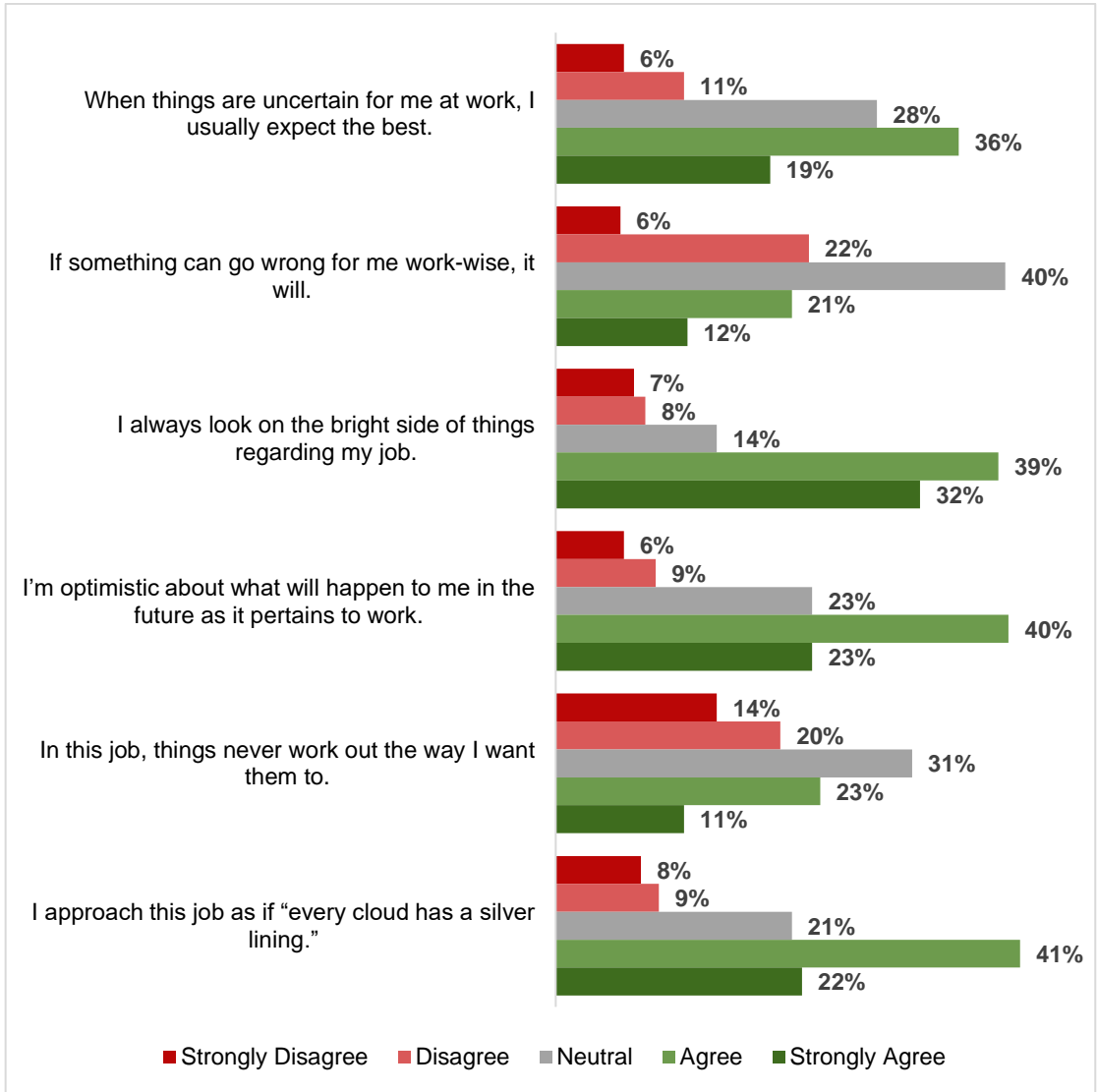


Chart 6.10: Responses to items D1.19 – D1.24 (Optimism)

These findings provide evidence that the respondents made positive attributions about succeeding in their current situation as well as in the future, an attribution which Luthans, Youssef and Avolio (2007) equated with optimism. In conclusion, the above findings indicate that the majority of the respondents exhibited high levels of PsyCap.

6.3 INFERENCE STATISTICS AND HYPOTHESIS TESTING

The distribution of the data obtained for each item in the questionnaire should be determined first before the hypotheses formulated for the study can be tested, as the distribution influences the decision whether parametric or non-parametric tests should be used to test the hypotheses. The skewness and kurtosis of the distribution of the data was determined for each item measuring psychological recession (Section B), positive HRM practices (Section C), and PsyCap (Section D), before hypothesis testing commenced. The results indicated that the data for all items revealed a skewness of less than an absolute value of two. Furthermore, the results indicated that all items had a kurtosis of less than the absolute value of seven. Therefore, it could be assumed that the distribution of data for all items fell within the parameters of what could be considered a sufficiently normal distribution (West, Finch & Curran, 1995). For the purposes of testing the hypotheses of the study, the following parametric tests were used: Pearson's product moment correlation, SEM, multiple regression analysis, and a one-sample t-test.

Descriptive statistics as discussed in section 6.2 are informative. Inferential statistics, on the other hand, consist of various techniques that help a researcher make generalisations about the population from which the sample was selected (Neuman, 2011). Since EFA was employed in section 5.6.3 to prepare the data for inferential analysis, Figure 6.1 presents the refined conceptual model specifying the new factors.

For this study, the first stage in the inferential statistical analysis involved a Pearson correlation analysis to explore the relationships between the variables as depicted in hypotheses two to five.

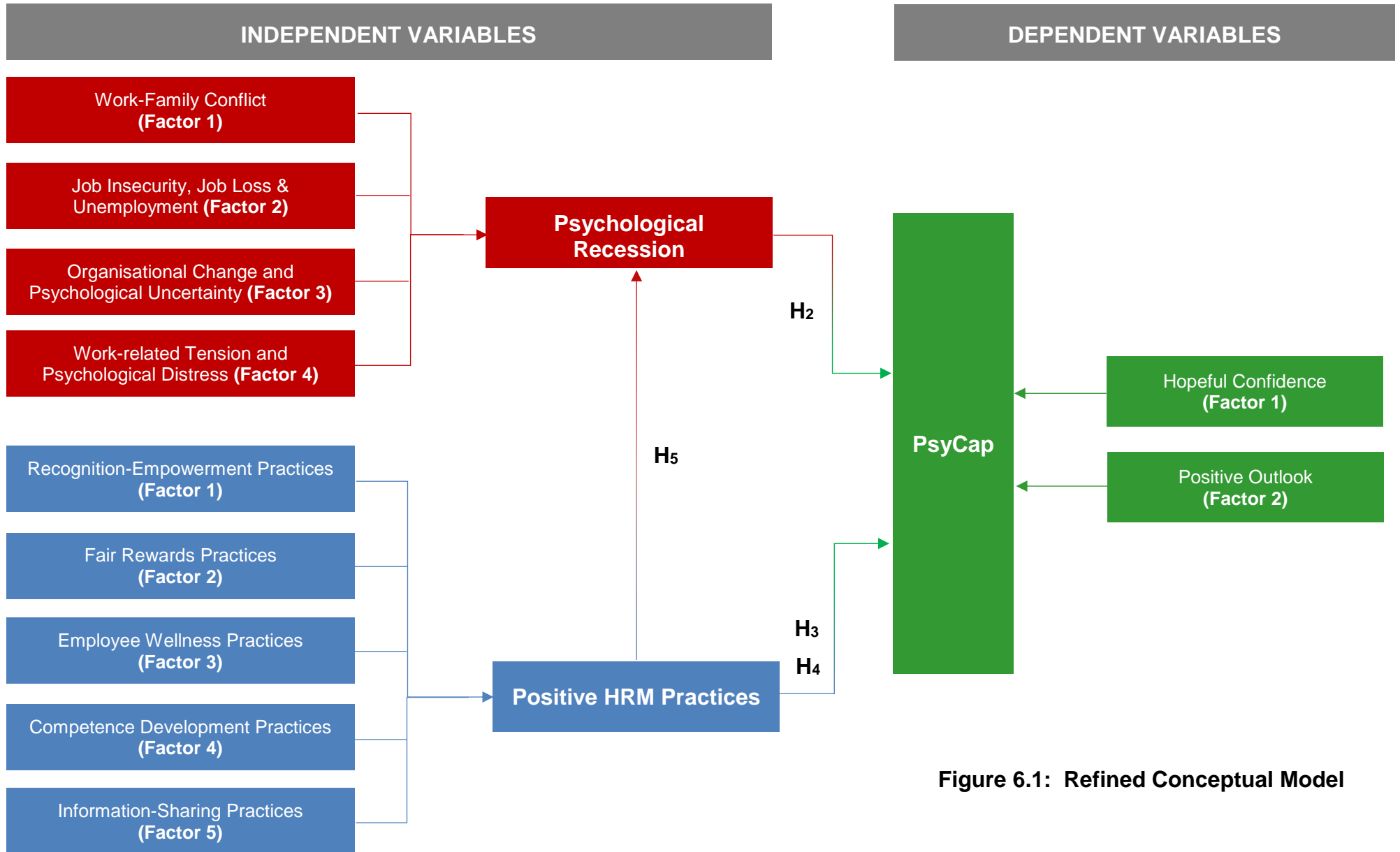


Figure 6.1: Refined Conceptual Model

To explore the relationships between the constructs more robustly, multiple regression analysis and SEM was undertaken to further assess hypotheses two to five. Hypothesis one was tested by means of a one-sample t-test.

The following sections present the results for the testing of the hypotheses formulated for the study.

6.3.1 Pearson's product-moment correlation analysis

The Pearson's product-moment correlation (abbreviated as r) was utilised to measure the relationships between the variables depicted in the conceptual model. The direction of the relationship between the variables can be classified into two categories: positive and negative (inverse).

In a positive relationship, the two variables tend to move in the same direction. For example, as the value of the X variable increases, the Y variable also tends to increase. When the X variable decreases, the Y variable also decreases (Gravetter & Wallnau, 2005). Regarding a negative (inverse) relationship, the two variables tend to move in opposite directions. As the X variable increases, the Y variable decreases, and vice versa. The direction of a relationship is identified by the sign of the correlation. A positive value indicates a positive relationship, whereas a negative value signifies an inverse relationship (Gravetter & Wallnau, 2005).

The Pearson's product moment correlation is the most suitable and generally used statistic when determining the strength of association between two variables (Malhotra, 2007), and serves as an accepted primer for SEM (Blunch, 2011). Although correlation does not necessarily provide ultimate proof of cause and effect, it does provide a foundation for accepting or rejecting hypotheses based on a qualitative comparison of the results with the main theoretical findings (Gravetter & Wallnau, 2005; Neuman, 2011).

Hypotheses formulated to test the linear correlations between constructs and related variables in this study are presented in Table 6.15.

Table 6.15: Hypotheses formulated for Pearson's product-moment correlation analysis

Hypotheses: Relationships amongst constructs and related variables	
H₂	A psychological recession negatively influences employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.
H₃	HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.
H₄	A bundle of HRM practices that enhances PsyCap can be identified
H₅	HRM practices buffer experiences of the negative impact of a psychological recession

Statistical significance was determined by means of the p-value, where a small p-value ($p\text{-value} < 0.05$) is seen as adequate evidence that the result is statistically significant (Ellis & Steyn, 2003).

Relating to practical significance, effect sizes (Cohen, 1988) were used in addition to statistical significance to determine the significance of the relationships. Effect sizes could draw attention to results that appear statistically significant, but that have little practical relevance (Cohen, 1988). According to Cohen (1988), Pearson correlation coefficients of $r > 0.10$, $r > 0.30$, and $r > 0.50$ are indicative of weak, moderate, and strong correlations. These effect sizes were used to explain and interpret the correlations among these variables.

H₂: A psychological recession negatively influences employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.

Table 6.16 reflects the correlations between scores obtained for PsyCap and the psychological recession scale and their respective dimensions as determined by a Pearson's product-moment correlation calculation. Based on the correlation matrix presented in Table 6.16, a strong but inverse relationship between the total scores for psychological recession and PsyCap (-0.60) is evident. The large effect size ($r = -0.60$) indicates that a practically significant correlation exists between these two variables. The results therefore demonstrate that experiences of a psychological recession are associated with lower levels of PsyCap.

Table 6.16: Correlations between psychological recession and PsyCap

	Work-family conflict	Job insecurity, job loss & unemployment	Organisational change & psychological uncertainty	Work-related tension & psychological distress	Psychological recession (Total)
Hopeful confidence	<u>-0.45</u>	-0.48	-0.55	<u>-0.34</u>	-0.59
Positive outlook	<u>-0.39</u>	<u>-0.35</u>	<u>-0.45</u>	<u>-0.38</u>	-0.51
PsyCap (Total)	<u>-0.46</u>	<u>-0.46</u>	-0.55	<u>-0.39</u>	-0.60
Marked correlations (in red) are significant at $p < 0.05$ Bold: Strong correlation ($ r \geq 0.50$) Underline: Moderate correlation ($0.30 \leq r < 0.50$) Italic: Weak correlation ($ r < 0.30$)					

Both hopeful confidence (-0.59) and positive outlook (-0.51) have a strong inverse relationship with the total score for psychological recession, which is suggested by the correlation coefficient being greater than 0.50. Organisational change and psychological uncertainty has a strong inverse relationship with hopeful confidence (-0.55) and overall PsyCap (-0.55). Since major change processes create a great deal of uncertainty and stress for employees, several studies have shown that uncertainty can reduce coping and hopefulness, as it increases anxiety, negative mood, and fear (Clayton, Mishel & Belyea, 2006; Reich, Johnson, Zautra & Davis, 2006; Rice, 2012). Furthermore, too much uncertainty may negatively impact employees' hope, and it is therefore crucial that organisations provide employees with accurate information about current circumstances and options to maintain hope (Cobb, Puchalski & Rumbold, 2012).

The overall finding related to the relationship between the psychological recession and PsyCap is congruent with the literature presented in Chapter Four, as previous researchers have reported that stressful work environments, work-family conflict, unemployment, job insecurity and psychological uncertainty negatively influence employees' PsyCap (Cole, 2006; Epitropaki,

2013; Li, McMurray, & Stanley, 2008; Liu, Chang, Fu, Wang & Wang, 2012; Newman, Ucbasaran, Zhi & Hirst, 2014; Wang, Liu, Wang & Wang, 2012).

The above findings provide support for hypothesis two.

H₃: HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.

As indicated in Table 6.17, it is clear that there is a moderate positive correlation of 0.47 between positive HRM practices (total score) and overall PsyCap. The medium effect size ($r = 0.47$) indicates that a practically significant correlation was uncovered between these two variables.

This finding suggests that HRM practices in general create a supportive and positive organisational environment that fosters the development of PsyCap. Therefore, hypothesis three is supported by these findings.

H₄: A bundle of HRM practices that enhance PsyCap can be identified

From Table 6.17 it is clear that a positive relationship exists between the HRM practices (total) and PsyCap (total), but that the strength of the relationships between the various components differs. In addition, positive HRM practices (total) were strongly related with hopeful confidence, yet only moderately related with positive outlook. As such, an assumption is made that certain HRM practices are more related with PsyCap than others, which provides a foundation for supporting hypothesis four.

Specifically, recognition-empowerment, employee wellness, competence development and information-sharing as positive HRM practices showed a moderate to strong relation with hopeful confidence (r varying between 0.41 and 0.51). In contrast, mostly weak positive relationships were found between HRM practices and positive outlook. Only competence development practices showed a moderate positive relation to positive outlook.

Table 6.17: Correlations between positive HRM practices and PsyCap

	Recognition-empowerment	Fair rewards	Employee wellness	Competence development	Information-sharing	Positive HRM practices (Total)
Hopeful confidence	<u>0.41</u>	0.25	0.50	0.51	<u>0.46</u>	0.53
Positive outlook	<i>0.27</i>	<i>0.18</i>	<i>0.27</i>	<u>0.34</u>	<i>0.26</i>	<u>0.33</u>
PsyCap (Total)	<u>0.38</u>	<i>0.23</i>	<u>0.42</u>	<u>0.47</u>	<u>0.39</u>	<u>0.47</u>
Marked correlations (in red) are significant at $p < 0.05$ Bold: Strong correlation ($ r \geq 0.50$) Underline: Moderate correlation ($0.30 \leq r < 0.50$) Italic: Weak correlation ($ r < 0.30$)						

The results highlight the importance of competence development as a critical HRM practice for developing the overall PsyCap of employees, and recognition-empowerment, employee wellness and information-sharing, in addition to competence development, as critical HRM practices for developing hopeful confidence.

The above findings provide support for hypotheses four, and suggest that a bundle of positive HRM practices has the potential to enhance employees' PsyCap.

H₅: HRM practices buffer experiences of the negative impact of a psychological recession

Table 6.18 shows a practically significant inverse relationship (-0.64) between positive HRM practices (total score) and psychological recession (total score). A strong but inverse correlation (-0.56) is evident between competence development (as a positive HRM practice) and job insecurity, job loss and unemployment (a component of a psychological recession).

This finding suggests that investments in training and development may alleviate perceptions of job insecurity since employees perceive employer investments in training as symbolic of continued employment (Fiorito, Bozeman, Young & Meurs, 2007).

Table 6.18: Correlations between positive HRM practices and psychological recession

	Work-family conflict	Job insecurity, job loss & unemployment	Organisational change & psychological uncertainty	Work-related tension & psychological distress	Psychological recession (Total)
Recognition-empowerment	<u>-0.42</u>	<u>-0.44</u>	-0.53	<u>-0.39</u>	-0.58
Fair rewards	<u>-0.30</u>	<u>-0.33</u>	<u>-0.32</u>	<u>-0.23</u>	-0.38
Employee wellness	<u>-0.41</u>	<u>-0.42</u>	<u>-0.44</u>	<u>-0.34</u>	-0.52
Competence development	<u>-0.38</u>	-0.56	<u>-0.46</u>	<u>-0.37</u>	-0.57
Information-sharing	<u>-0.35</u>	-0.50	<u>-0.42</u>	<u>-0.29</u>	-0.51
Positive HRM practices (Total)	<u>-0.47</u>	-0.56	-0.54	<u>-0.40</u>	-0.64
Marked correlations (in red) are significant at $p < 0.05$ Bold: Strong correlation ($ r \geq 0.50$) Underline: Moderate correlation ($0.30 \leq r < 0.50$) Italic: Weak correlation ($ r < 0.30$)					

Table 6.18 indicates strong inverse relationships between positive HRM practices and job insecurity, job loss and unemployment (-0.56), and organisational change and psychological uncertainty (-0.54). Table 6.18 further shows strong inverse correlations between recognition-empowerment (-0.58), employee wellness (-0.52), competence development (-0.57), and information sharing (-0.51), and total scores for the psychological recession.

The above findings suggest that positive HRM practices have the potential to reduce the negative experiences associated with a psychological recession, providing a foundation for the acceptance of hypothesis five.

6.3.2 Structural equation modelling

As indicated earlier, it should be noted that the above Pearson product moment correlations only indicate a relationship between the variables and does not explain the reason why the variables are related to each other.

The relationships between the variables should therefore not be interpreted as proof of a cause-and-effect relationship between the variables. Although there may be a causal relationship, the simple existence of a correlation does not prove it (Gravetter & Wallnau, 2005). For this reason, it was decided to further test the relationships between the constructs by means of SEM.

Hair, Black, Babin, Anderson and Tatham (2006) define SEM as a multivariate technique that combines aspects of multiple regression and factor analysis to simultaneously establish a series of interrelated dependence relationships. SEM uses various types of models to depict relationships among observed variables, with all models having the same basic goal of providing a quantitative test of a theoretical model hypothesised by the researcher (Schumacker & Lomax, 2010). Furthermore, the conceptual model depicted in Chapter Five can therefore be tested in SEM to determine how the various constructs are related to each other (Schreiber, Stage, King, Nora & Barlow, 2006; Schumacker & Lomax, 2010). Amos 24 (IBM Corp., 2016) was utilised to conduct the SEM.

To conduct SEM, a measurement model was compiled showing the proposed relationships amongst the variables. The measurement model was then evaluated by a variety of goodness-of-fit indices. Fit indices, as described by Suhr (2006), refer to the degree to which a pattern of fixed and free parameters stated in the model shows consistency with the pattern of variances and covariances from the set of observed data.

Among the variety of available fit indices, Jackson, Gillaspay and Purc-Stephenson (2009) and Schreiber (2008) recommend the reporting of the Chi-square statistic (χ^2) and its associated degrees of freedom (χ^2/df), the Tucker-Lewis Index (TLI), the Comparative Fit Index (CFI) and the Root Mean Square of Approximation (RMSEA). As the TLI and CFI are highly correlated, it is only necessary that one of the two fit indices is reported (Kenny, 2012). These fit indices can be divided into two categories, namely absolute fit indices and incremental fit indices (Hooper, Coughlan & Mullen, 2008).

Absolute fit indices (χ^2 test and RMSEA) determine the most essential indication of how well a model fits the sample data collected. Incremental fit indices (CFI) compare the χ^2 value (not in its raw form) to a baseline model. These fit indices are vital, as a good fitting measurement model is essential before the causal paths of the model can be analysed (Kenny, 2012).

In addition to determining the fit indices, in the next step the paths among the variables were investigated by firstly determining their statistical significance (for the purpose of this study critical ratios are used). The critical ratio test statistic should be greater than ± 1.96 for the null hypothesis to be rejected and to further indicate two-sided significance at the customary 5% level (Hoe, 2008; Hox & Bechger, 1998).

Once statistical significance of the standardised paths was examined, the next step was to investigate the strength of the relationships among the variables through the use of standardised regression weights, which range between -1 and +1 (Hoe, 2008). According to Chin (1998), the standardised regression weights should ideally be above 0.30 or at least 0.20 to be considered as meaningful. Suhr (2006) adds that standardised regression weights with an absolute value of less than 0.10 indicate a small effect, while values around 0.30 indicate a medium effect, and values greater than 0.50 indicate a large effect.

Based on the preceding discussion, the results of the model testing are discussed below.

6.3.2.1 Testing the theoretical model

To test the theoretical model for this study, the researcher proposed the following structural equation model:

- A psychological recession negatively influences PsyCap (H₂)
- HRM practices positively influence employees' PsyCap (H₃; H₄)
- A bundle of HRM practices positively influence employees' PsyCap (H₃; H₄)
- HRM practices buffer the negative impact of a psychological recession (H₅)

Figure 6.2 presents the theoretical model to be tested to determine how well the model fits the observed data. The structural equations model also indicates the hypotheses as presented in Table 6.15.

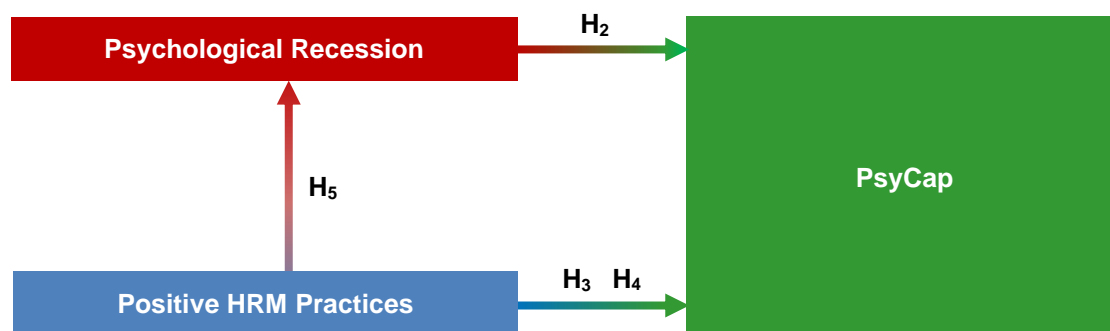


Figure 6.2: Structural equations model

The fit indices utilised for the theoretical model are subsequently presented in Table 6.19.

Table 6.19: Fit indices for the theoretical model

Fit indices*	Source for suggested cut-off point	Suggested cut-off point	Fit indices value
Relative Chi-square ratio (x^2/df)	Wheaton, Muthen, Alwin & Summers (1977)	≤ 5.00	1.932
Bentler-Comparative Fit Index (CFI)	Hoe (2008); Hu & Bentler (1999)	≥ 0.90	0.844
Root Mean Square Error of Approximation (RMSEA)	Hoe (2008); MacDonald & Ho (2002)	$< 0.05 = \text{Good fit}$ $\leq 0.08 = \text{Acceptable fit}$ $\leq 0.10 = \text{Average fit}$	0.054
*The fit indices represent the overall fit of the model for this study's data			

From Table 6.19 it is evident that the relative Chi-square ratio (x^2/df) value of 1.932 indicates a good model fit since the value is well below the suggested cut-off point of five as proposed by Wheaton, Muthen, Alwin and Summers (1977). The Bentler-Comparative Fit Index (CFI) is slightly below the cut-off point of 0.90 (CFI = 0.844), while the RMSEA value of 0.054 indicates a good model fit (Hoe, 2008).

In addition to determining the fit indices for the measurement model, the next step involved an analysis of critical ratios among the variables to determine the statistical significance of the different paths. The critical ratios for the different paths are presented in Table 6.20. Table 6.20 also presents the standardised regression weights, indicating the extent to which variables in the theoretical model contributed to the prediction of the dependent variable, therefore comparing the contribution of each independent variable (Pallant, 2011). As mentioned in section 6.3.2, standardised regression weights with values less than 0.10 indicate a small effect, values around 0.30 indicate a medium effect, and values greater than 0.50 indicate a large effect (Suhr, 2006).

Table 6.20: Standardised regression weights of path model

Paths	Standardised regression weights (β)	Size of direct effect	Critical ratio
HRM Practices \rightarrow Psychological Recession	0.771	Large	5.16*
Psychological Recession \rightarrow PsyCap	0.432	Medium	3.20*
HRM Practices \rightarrow PsyCap	0.333	Medium	2.82*
*Statistically significant p-value ≤ 0.05			

The preceding results indicate that all three paths generated critical ratios greater than ± 1.96 , therefore indicating that the direct paths amongst the variables are significant. Regarding the standardised regression weights, Table 6.20 indicates one path with a direct large effect, as well as two paths with a medium effect. The most significant path with the large effect, as evident in Table 6.20, is between “HRM Practices \rightarrow Psychological Recession”. It can therefore be accepted that a bundle of positive HRM practices has a strong unique influence on employees’ experiences of a psychological recession, since the variance explained by all the other variables in the model is controlled (Pallant, 2011). The second path, “Psychological Recession \rightarrow PsyCap”, is also of importance as it emphasises the relevance of the first path. A psychological recession impacts employees’ levels of PsyCap and therefore positive HRM practices are required to negate the negative impact of such a recession.

The third path emphasises the role of positive HRM practices in the development of employees' PsyCap. Therefore, the path model confirms that a psychological recession influences employees' levels of PsyCap, and that positive HRM practices not only negate this negative impact, but also develop employees' PsyCap. These findings provide additional support for hypothesis two to five.

6.3.3 Multiple regression analysis

In addition to the above SEM, standard multiple regression analysis was conducted to determine if any of the predictor variables or their dimensions had any predictive power in explaining the variance in the dependent variables. In this section, each hypothesis is initially presented followed by the relevant results and main findings pertaining to the results.

H₂	A psychological recession negatively influences employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.
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Figure 6.3 illustrates hypothesis two, proposing that a psychological recession negatively influences PsyCap.

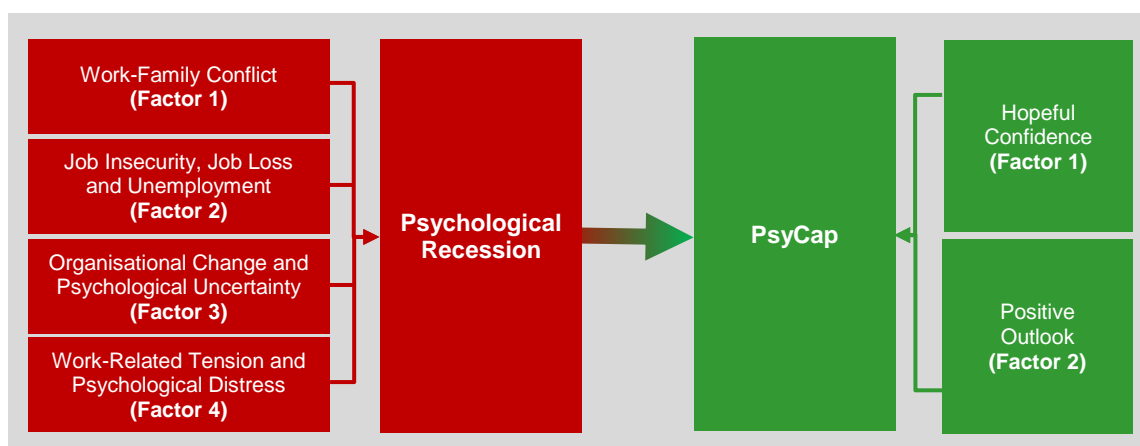


Figure 6.3: Diagram illustrating hypothesis 2

The result of the multiple regression, with PsyCap as dependent variable, is presented in Table 6.21.

As can be seen in Table 6.21, the multiple regression with psychological recession as the predictor of PsyCap produced an $R^2 = 0.365$, suggesting that 37% of the variance in PsyCap is explained by the psychological recession.

Table 6.21: Multiple regression analysis: The influence of psychological recession on PsyCap

DEPENDENT VARIABLE: PSYCAP					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.446	0.143		38.101	0.000
Psychological Recession	-0.671	0.050	<u>-0.605</u>	-13.491	0.000
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.605 ^a	0.365 (37%)	0.363	0.626		
a. Predictors: (Constant), Psychological Recession Significant correlations are in bold and underlined					
DEPENDENT VARIABLE: PSYCAP					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.406	0.143		37.791	0.000
Work-Family Conflict	-0.151	0.049	<u>-0.170</u>	-3.046	0.003
Job Insecurity, Job Loss & Unemployment	-0.154	0.045	<u>-0.182</u>	-3.413	0.001
Organisational Change & Psychological Uncertainty	-0.296	0.047	<u>-0.342</u>	-6.250	0.000
Work-Related Tension & Psychological Distress	-0.076	0.044	-0.093	-1.719	0.087
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.621 ^a	0.386 (39%)	0.378	0.619		
a. Predictors: (Constant), Work-Family Conflict (Factor 1), Job Insecurity, Job Loss & Unemployment (Factor 2), Organisational Change & Psychological Uncertainty (Factor 3), Work-Related Tension & Psychological Distress (Factor 4) Significant correlations are in bold and underlined					

In refining this further, the four psychological recession factors were regressed onto PsyCap. The results indicate that together, the four psychological recession factors explain 39% of the variance in PsyCap.

The standardised beta coefficient suggests that organisational change and psychological uncertainty makes the strongest unique contribution to explaining levels of PsyCap ($\beta = -0.342$), when the variance explained by other variables is controlled for.

It was also determined whether any of the four factors of a psychological recession played a part in predicting the two PsyCap factors. The regression summary for this analysis is presented in Table 6.22. As can be seen from Table 6.22, the multiple regression with all predictor variables for hopeful confidence produced an $R^2 = 0.390$. This model suggests that 39% of the variance in hopeful confidence is explained by the four psychological recession factors.

Work-family conflict ($\beta = -0.172$), job insecurity, job loss and unemployment ($\beta = -0.235$), and organisational change and psychological uncertainty ($\beta = -0.351$) appear to be the three most significant predictors of hopeful confidence. The standardised beta coefficient for organisational change and psychological uncertainty (Factor 3) is higher than the beta values for work family conflict ($\beta = -0.172$), job insecurity, job loss and unemployment ($\beta = -0.235$), and work-related tension and psychological distress ($\beta = -0.014$), which suggests that factor 3 explains more of the variance in hopeful confidence than the other three factors.

Table 6.22: Multiple regression analysis: The influence of psychological recession factors on PsyCap factors

DEPENDENT VARIABLE: HOPEFUL CONFIDENCE					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.556	0.156		35.663	0.000
Work-Family Conflict	-0.166	0.054	<u>-0.172</u>	-3.088	0.002
Job Insecurity, Job Loss & Unemployment	-0.217	0.049	<u>-0.235</u>	-4.418	0.000
Organisational Change & Psychological Uncertainty	-0.332	0.052	<u>-0.351</u>	-6.435	0.000
Work-Related Tension & Psychological Distress	-0.012	0.048	-0.014	-0.259	0.796

Table 6.22 (continued): Multiple regression analysis: The influence of psychological recession factors on PsyCap factors

Model Summary					
R	R Square	Adjusted R Square		Std. Error of the Estimate	
.624 ^a	0.390 (39%)	0.382		0.674	
a. Predictors: (Constant), Work-Family Conflict (Factor 1), Job Insecurity, Job Loss & Unemployment (Factor 2), Organisational Change & Psychological Uncertainty (Factor 3), Work-Related Tension & Psychological Distress (Factor 4) Significant correlations are in bold and underlined					
DEPENDENT VARIABLE: POSITIVE OUTLOOK					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.257	0.172		30.580	0.000
Work-Family Conflict	-0.135	0.059	<u>-0.138</u>	-2.272	0.024
Job Insecurity, Job Loss & Unemployment	-0.091	0.054	-0.097	-1.676	0.095
Organisational Change & Psychological Uncertainty	-0.260	0.057	<u>-0.273</u>	-4.571	0.000
Work-Related Tension & Psychological Distress	-0.139	0.053	<u>-0.154</u>	-2.626	0.009
Model Summary					
R	R Square	Adjusted R Square		Std. Error of the Estimate	
.519 ^a	0.269 (27%)	0.260		0.744	
a. Predictors: (Constant), Work-Family Conflict (Factor 1), Job Insecurity, Job Loss & Unemployment (Factor 2), Organisational Change & Psychological Uncertainty (Factor 3), Work-Related Tension & Psychological Distress (Factor 4) Significant correlations are in bold and underlined					

The four predictor variables together explain 27% of the variance in positive outlook. However, from Table 6.22 it is evident that work-family conflict, organisational change and psychological uncertainty, and work-related tension and psychological distress, were the most significant predictors of positive outlook. In summary, the multiple regression analyses showed a negative and significant relationship ($\beta = -0.605$) between psychological recession and PsyCap, suggesting that personal exposure and vulnerability relating to a psychological recession may negatively influence an employee's overall level of PsyCap. Further to this, organisational change and psychological uncertainty (factor 3) contributed most to predicting overall PsyCap (Table 6.21), including hopeful confidence and positive outlook (Table 6.22). Given the foregoing, hypothesis two is supported.

H ₃	HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.
H ₄	A bundle of HRM practices that enhances PsyCap can be identified

Figure 6.4 illustrates the above hypotheses, showing a positive relationship between positive HRM practices and PsyCap, and suggesting that a bundle of positive HRM practices has the potential to enhance employees' PsyCap.

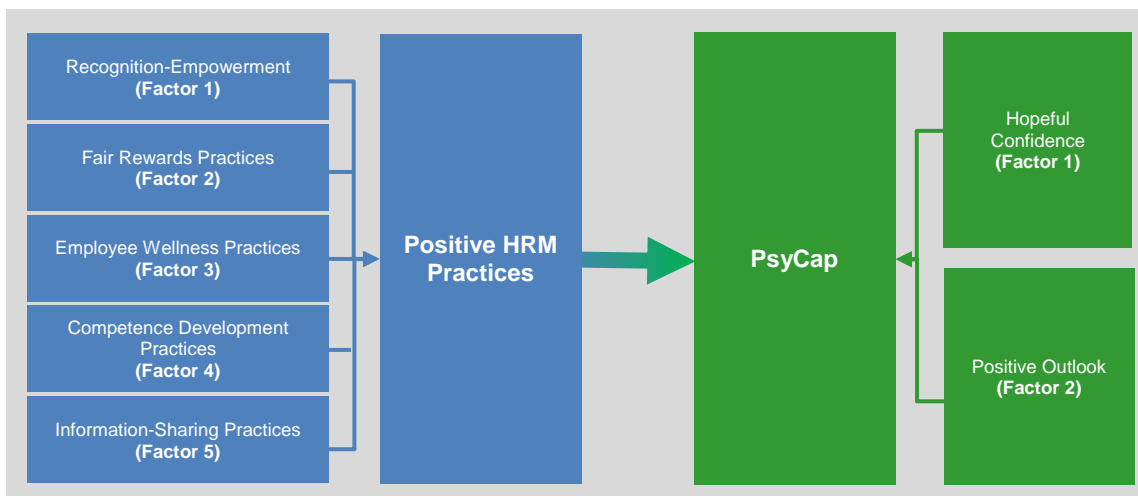


Figure 6.4: Diagram illustrating hypotheses 3 and 4

Table 6.23 provides an overview of the multiple regression analysis with PsyCap as dependent variable, and positive HRM practices as independent variable.

Table 6.23: Multiple regression analysis: The influence of HRM practices on PsyCap

DEPENDENT VARIABLE: PSYCAP					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.266	0.143		15.889	0.000
Positive HRM Practices	0.458	0.048	0.474	9.557	0.000

Table 6.23 (continued): Multiple regression analysis: The influence of HRM practices on PsyCap

Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.474 ^a	0.224 (22%)	0.222	0.692		
a. Predictors: (Constant), Positive HRM Practices Significant correlations are in bold and underlined					
DEPENDENT VARIABLE: PSYCAP					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.194	0.143		15.366	0.000
Recognition-Empowerment Practices	0.053	0.054	0.068	0.978	0.329
Fair Rewards Practices	-0.001	0.045	-0.002	-0.028	0.978
Employee Wellness Practices	0.148	0.048	<u>0.201</u>	3.098	0.002
Competence Development Practices	0.223	0.058	<u>0.284</u>	3.856	0.000
Information-Sharing Practices	0.025	0.064	0.031	0.383	0.702
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.504 ^a	0.254 (25%)	0.242	0.683		
a. Predictors: (Constant), Recognition-Empowerment Practices (Factor 1), Fair Rewards Practices (Factor 2), Employee Wellness Practices (Factor 3), Competence Development Practices (Factor 4), Information-Sharing Practices (Factor 5) Significant correlations are in bold and underlined					

As can be seen in Table 6.23, this regression analysis produced a $R^2 = 0.224$, $p < 0.01$, indicating that positive HRM practices as an independent variable accounted for 22% of the variance observed in PsyCap. Furthermore, this result can be interpreted as indicating that positive HRM practices have a positive influence on overall PsyCap.

The value of the beta coefficient suggests that positive HRM practices make a significant positive contribution to the variance in PsyCap at the 0.01 level. When the five positive HRM Practices were regressed onto PsyCap, the results indicate that competence development practices made the largest contribution to explaining overall PsyCap with a p-value of less than 0.05, also supporting the earlier findings of the Pearson's correlation analysis. The beta coefficients of two factors, namely employee wellness practices ($\beta = 0.201$) and competence development practices ($\beta = 0.284$), were statistically significant.

Therefore, employee wellness practices and competence development practices were the only significant predictors of employees' overall PsyCap. The variable fair rewards practices was negatively related to overall PsyCap ($\beta = -0.002$).

In refining this further, it was also necessary to reflect on whether the five positive HRM practices as independent variables could provide an explanation for the variance in the two PsyCap factors (i.e. hopeful confidence and positive outlook). The regression summary for this analysis is reported in Table 6.24.

Table 6.24: Multiple regression analysis: The influence of HRM practices on PsyCap factors

DEPENDENT VARIABLE: HOPEFUL CONFIDENCE					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.930	0.148		13.059	0.000
Recognition-Empowerment Practices	0.038	0.056	0.045	0.677	0.499
Fair Rewards Practices	-0.031	0.047	-0.037	-0.667	0.505
Employee Wellness Practices	0.224	0.049	<u>0.278</u>	4.517	0.000
Competence Development Practices	0.229	0.060	<u>0.268</u>	3.840	0.000
Information-Sharing Practices	0.084	0.066	0.097	1.267	0.206
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.574 ^a	0.330 (33%)	0.319	0.707		
a. Predictors: (Constant), Recognition-Empowerment Practices (Factor 1), Fair Rewards Practices (Factor 2), Employee Wellness Practices (Factor 3), Competence Development Practices (Factor 4), Information-Sharing Practices (Factor 5) Significant correlations are in bold and underlined					
DEPENDENT VARIABLE: POSITIVE OUTLOOK					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.458	0.170		14.439	0.000
Recognition-Empowerment Practices	0.068	0.064	0.080	1.053	0.293
Fair Rewards Practices	0.029	0.054	0.034	0.532	0.595
Employee Wellness Practices	0.073	0.057	0.090	1.276	0.203
Competence Development Practices	0.216	0.069	<u>0.250</u>	3.135	0.002
Information-Sharing Practices	-0.035	0.077	-0.040	-0.457	0.648

Table 6.24 (continued): Multiple regression analysis: The influence of HRM practices on PsyCap factors

Model Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.355 ^a	0.126 (13%)	0.112	0.815
a. Predictors: (Constant), Recognition-Empowerment Practices (Factor 1), Fair Rewards Practices (Factor 2), Employee Wellness Practices (Factor 3), Competence Development Practices (Factor 4), Information-Sharing Practices (Factor 5) Significant correlations are in bold and underlined			

As can be seen in Table 6.24, the five positive HRM practices as independent variables accounted for 33% of the variance observed in hopeful confidence. Furthermore, the value of the beta coefficient suggests that employee wellness practices ($\beta = 0.278$) and competence development practices ($\beta = 0.268$) were the only two variables that significantly contributed to the variance of hopeful confidence. Again, the value of the beta coefficient suggests that fair rewards practices made a negative contribution to the variance in hopeful confidence ($\beta = -0.037$).

Lastly, the regression analysis was applied to determine whether the five positive HRM practices could provide an explanation for the variance in positive outlook as dependent variable. As can be seen in Table 6.24, this specific regression analysis indicates that combined, the five positive HRM practices as independent variables accounted for 13% of the variance observed in positive outlook. An analysis of the beta values indicates that competence development practices contributed the most to the variance of the dependent variable (i.e. positive outlook), and was the only significant predictor of positive outlook ($\beta = 0.250$). Interestingly, information-sharing practices was negatively related to positive outlook ($\beta = -0.040$).

Based on the above multiple regression summaries, hypotheses two and three are accepted, as positive HRM practices made a significant positive contribution to predicting overall PsyCap (Table 6.23). Further to this, when looking at the five positive HRM practices and overall PsyCap (Table 6.23), competence development practices contributed most to predicting overall

PsyCap ($\beta = 0.284$) and positive outlook ($\beta = 0.250$), where employee wellness practices contributed the most to predicting hopeful confidence ($\beta = 0.278$).

The above findings also assisted with the identification of an optimal bundle of HRM practices that enhances employees' PsyCap.

H₅	HRM practices buffer experiences of the negative impact of a psychological recession
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Figure 6.5 provides an illustration of the proposed relationship between positive HRM practices and psychological recession, suggesting that five distinct positive HRM practices may reduce the negative experiences associated with a psychological recession.

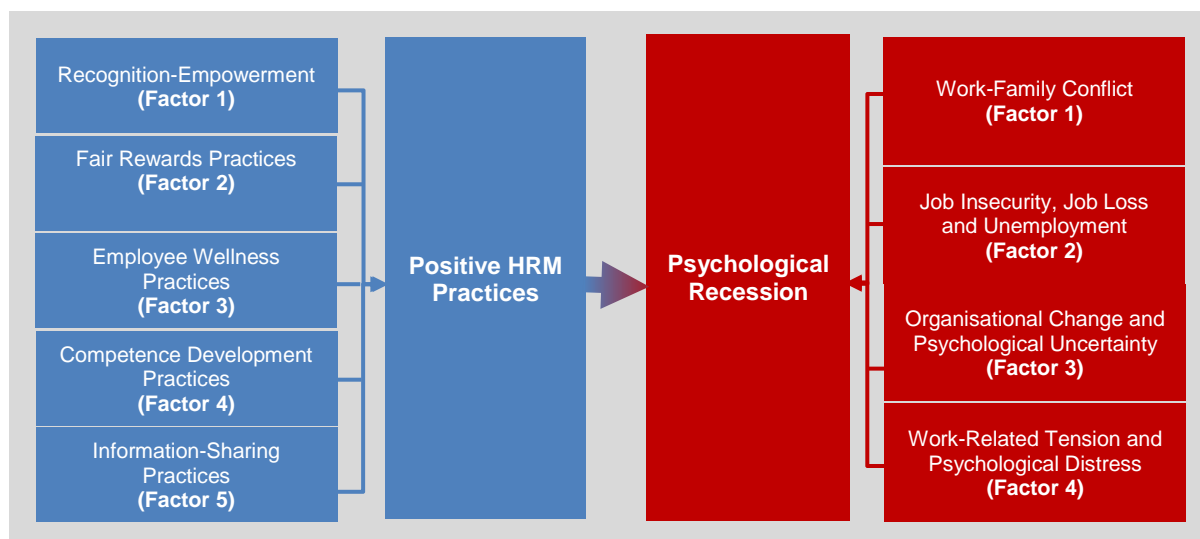


Figure 6.5: Diagram illustrating hypothesis 5

To test hypothesis five, a regression analysis with the psychological recession as dependent variable and positive HRM practices as independent variable was conducted. These results are reported in Table 6.25. As can be seen in Table 6.25, the results showed that positive HRM practices predicted 41% of the variance in psychological recession ($R^2 = 0.412$). The value of the standardised beta coefficient shows that positive HRM practices have a significant negative influence on psychological recession (-0.642).

In addition to this, multiple regressions were also calculated with the five positive HRM practices as predictors and psychological recession as dependent variable.

Table 6.25: Multiple regression analysis: The influence of HRM practices on psychological recession

DEPENDENT VARIABLE: PSYCHOLOGICAL RECESSION					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.388	0.112		39.233	0.000
Positive HRM Practices	-0.560	0.038	<u>-0.642</u>	-14.884	0.000
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.642 ^a	0.412 (41%)	0.410	0.543		
a. Predictors: (Constant), Positive HRM Practices Significant correlations are in bold and underlined					
DEPENDENT VARIABLE: PSYCHOLOGICAL RECESSION					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.416	0.112		39.548	0.000
Recognition-Empowerment Practices	-0.201	0.042	<u>-0.288</u>	-4.757	0.000
Fair Rewards Practices	-0.074	0.035	<u>-0.108</u>	-2.106	0.036
Employee Wellness Practices	-0.127	0.037	<u>-0.191</u>	-3.399	0.001
Competence Development Practices	-0.186	0.045	<u>-0.263</u>	-4.111	0.000
Information-Sharing Practices	0.027	0.050	0.038	0.544	0.587
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.662 ^a	0.438 (44%)	0.429	0.534		
a. Predictors: (Constant), Recognition-Empowerment Practices (Factor 1), Fair Rewards Practices (Factor 2), Employee Wellness Practices (Factor 3), Competence Development Practices (Factor 4), Information-Sharing Practices (Factor 5) Significant correlations are in bold and underlined					

According to Table 6.25, the five positive HRM practices predicted 44% of the variance in the psychological recession. The value of the beta coefficients suggest that recognition-empowerment practices (-0.288), fair rewards practices (-0.108), employee wellness practices (-0.191) and competence development practices (-0.263) made significant contributions to explaining the

variance in psychological recession. Interestingly, information-sharing practices did not make a significant contribution to variance in psychological recession, and the beta value also indicated an insignificant positive relationship (0.038) between information-sharing practices and psychological recession.

From the results in Table 6.25 it can be concluded that recognition-empowerment practices made the largest contribution to the prediction of psychological recession, followed by competence development practices. The beta values for these two positive HRM practices were far higher than the beta values for the other HRM practices, therefore suggesting that recognition, empowerment and competence development practices have an important role to play in weathering the negative effects of a psychological recession.

To further test hypothesis five, it was also necessary to reflect on whether any of the five positive HRM practices played a part in predicting the four psychological recession factors. The regression summary for this analysis can be seen in Table 6.26.

Table 6.26: Multiple regression analysis: The influence of HRM practices on four psychological recession factors

DEPENDENT VARIABLE: WORK-FAMILY CONFLICT					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.436	0.163		27.223	0.000
Recognition-Empowerment Practices	-0.196	0.062	<u>-0.225</u>	-3.182	0.002
Fair Rewards Practices	-0.104	0.052	<u>-0.121</u>	-2.019	0.044
Employee Wellness Practices	-0.179	0.055	<u>-0.215</u>	-3.276	0.001
Competence Development Practices	-0.108	0.066	-0.123	-1.646	0.101
Information-Sharing Practices	0.071	0.073	0.080	0.973	0.331
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.486 ^a	0.237 (24%)	0.224	0.780		
a. Predictors: (Constant), Recognition-Empowerment Practices (Factor 1), Fair Rewards Practices (Factor 2), Employee Wellness Practices (Factor 3), Competence Development Practices (Factor 4), Information-Sharing Practices (Factor 5) (Significant correlations are in bold and underlined)					

Table 6.26 (continued): Multiple regression analysis: The influence of HRM practices on four psychological recession factors

DEPENDENT VARIABLE: JOB INSECURITY, JOB LOSS & UNEMPLOYMENT					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.381	0.158		27.694	0.000
Recognition-Empowerment Practices	-0.042	0.060	-0.045	-0.693	0.489
Fair Rewards Practices	-0.060	0.050	-0.066	-1.198	0.232
Employee Wellness Practices	-0.060	0.053	-0.069	-1.135	0.257
Competence Development Practices	-0.333	0.064	<u>-0.359</u>	-5.208	0.000
Information-Sharing Practices	-0.139	0.071	<u>-0.148</u>	-1.955	0.051
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.587 ^a	0.345 (35%)	0.335	0.757		
a. Predictors: (Constant), Recognition-Empowerment Practices (Factor 1), Fair Rewards Practices (Factor 2), Employee Wellness Practices (Factor 3), Competence Development Practices (Factor 4), Information-Sharing Practices (Factor 5) (Significant correlations are in bold and underlined)					
DEPENDENT VARIABLE: ORGANISATIONAL CHANGE & PSYCHOLOGICAL UNCERTAINTY					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.318	0.156		27.651	0.000
Recognition-Empowerment Practices	-0.325	0.059	<u>-0.363</u>	-5.495	0.000
Fair Rewards Practices	-0.070	0.049	-0.079	-1.408	0.160
Employee Wellness Practices	-0.143	0.052	<u>-0.168</u>	-2.741	0.006
Competence Development Practices	-0.119	0.063	-0.131	-1.885	0.060
Information-Sharing Practices	0.049	0.070	0.053	0.694	0.488
Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.575 ^a	0.331 (33%)	0.320	0.747		
a. Predictors: (Constant), Recognition-Empowerment Practices (Factor 1), Fair Rewards Practices (Factor 2), Employee Wellness Practices (Factor 3), Competence Development Practices (Factor 4), Information-Sharing Practices (Factor 5) (Significant correlations are in bold and underlined)					
DEPENDENT VARIABLE: WORK-RELATED TENSION & PSYCHOLOGICAL DISTRESS					
Independent Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.531	0.182		24.911	0.000
Recognition-Empowerment Practices	-0.242	0.069	<u>-0.255</u>	-3.513	0.001
Fair Rewards Practices	-0.064	0.058	-0.068	-1.113	0.267
Employee Wellness Practices	-0.126	0.061	<u>-0.140</u>	-2.072	0.039
Competence Development Practices	-0.182	0.074	<u>-0.189</u>	-2.474	0.014
Information-Sharing Practices	0.128	0.082	0.132	1.568	0.118

Table 6.26 (continued): Multiple regression analysis: The influence of HRM practices on four psychological recession factors

Model Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.441 ^a	0.194 (19%)	0.182	0.870
a. Predictors: (Constant), Recognition-Empowerment Practices (Factor 1), Fair Rewards Practices (Factor 2), Employee Wellness Practices (Factor 3), Competence Development Practices (Factor 4), Information-Sharing Practices (Factor 5) (Significant correlations are in bold and underlined)			

As can be seen in Table 6.26, the five positive HRM practices predict 24% of the variance in work-family conflict. The value of the beta coefficients suggests that recognition-empowerment practices ($\beta = -0.225$), fair rewards practices ($\beta = -0.121$), and employee wellness practices ($\beta = -0.215$) made significant contributions to explaining the variance in work-family conflict.

Table 6.26 further shows that competence development practices ($\beta = -0.359$) and information-sharing practices ($\beta = -0.148$) make a significant contribution to the variance in job insecurity, job loss and unemployment. This specific multiple regression analysis produced a $R^2 = 0.345$, therefore indicating that the five positive HRM practices together explain 35% of the variance observed in job insecurity, job loss and unemployment.

Regarding organisational change and psychological uncertainty, the value of the standardised beta coefficient suggests that recognition-empowerment practices ($\beta = -0.363$) and employee wellness practices ($\beta = -0.168$) make the strongest unique contribution to explaining the variance in organisational change and psychological uncertainty. The five positive HRM practices together explain 33% of the variance observed in “organisational change and psychological uncertainty” as dependent variable. When the five positive HRM practices were regressed onto the dependent variable “work-related tension and psychological distress”, the results indicate that recognition-empowerment practices ($\beta = -0.255$), employee wellness practices ($\beta = -0.140$), and competence development practices ($\beta = -0.189$) make the largest contribution to explaining work-related tension and psychological distress with p-values of less than 0.05.

From the results in Table 6.26 it can be concluded that recognition-empowerment practices contributed the most in explaining the variance in three of the four psychological recession factors (i.e. work-family conflict, organisational change and psychological uncertainty, and work-related tension and psychological distress). Based on the above multiple regression summaries, hypothesis five is therefore accepted.

6.3.4 One-sample t-test

Hypothesis one relates to whether South African employees experienced the negative effects of a psychological recession. The only feasible option for hypothesis testing based on sample mean scores for the factors was to test whether the population mean scores for the factors can be described as neutral. This implies considering the mean scores of the Psychological Recession Scale as one scale while not considering the mean scores for the different sub-scales, but then comparing the population mean score with the sample mean scores (for each sub-scale) to determine whether significant differences exist. For this reason, a one-sample t-test was conducted to test hypothesis one, and the results are presented in Table 6.27.

Table 6.27 presents the relevant descriptive statistics (means and standard deviations), as well as the accompanying p-value for each test and whether the differences between the means are significant ($p\text{-value} \leq 0.05$). The table also reports the corresponding effect sizes (d-values).

Table 6.27: One-sample t-tests: Factors (n = 318; d.f. = 317)

	Variable	Mean	SD	H ₁ :m	t	p	Cohen's d*
B1	Job Insecurity, Job Loss and Unemployment	2.47	0.91	<2,60	-2.47	.007	0.14
B2	Work-Family Conflict	2.97	0.89	≠2,60	7.40	<,0005	0.41
B3	Organisational Change and Psychological Uncertainty	2.52	0.88	<2,60	-1.60	0.110	0.09
B4	Work-Related Tension and Psychological Distress	2.99	0.89	≠2,60	7.85	<,0005	0.44
BT	Psychological Recession (Total)	2.76	0.73	≠2,60	4.04	<,0005	0.23
*Interpretation Intervals for Cohen's d: 0.20 – 0.49 (Small) 0.50 – 0.79 (Medium) 0.80+ (Large)							

For the variables with a significant difference between the population and sample means with a small effect, it can be concluded that the relevant population mean scores are neutral (in the interval 2.60 to 3.40). Furthermore, the results for the other variables are inconclusive, as there is not enough evidence to accept the alternative hypothesis (either $H1 > 2.60$ if $M < 3.0$ or $H1 < 3.4$ if $M > 3.0$) which implies that the observed mean values for these variables are too close to the threshold values between neutral and negative (2.60), and between neutral and positive (3.40).

Hypothesis one was therefore not supported. It can therefore be concluded that the respondents, as a whole, were neutral in terms of experiencing a psychological recession and whether they were affected.

6.4 CONCLUSION

In this chapter, the results obtained in the research study were discussed and interpreted. Various analyses were performed in this chapter to resolve the empirical sub-problems, and to accept or reject the five hypotheses stated in Chapter One. The data analysis presented in this chapter also provided a basis for developing the conclusions and recommendations that follow in Chapter Seven.

The descriptive statistics for the Psychological Recession Scale were presented by means of infographics and for the rest of the sub-scales in tables and charts. The various hypotheses formulated for the study were tested by means of various inferential statistical techniques. Hypotheses one was tested by means of a one-sample t-test. Pearson's product moment correlation analysis, SEM and multiple regression were utilised to test the relationships depicted in hypotheses two to five.

Chapter Seven offers a summary of significant findings and highlight the conclusions and recommendations from this study based on the research results discussed in Chapter Six. Furthermore, the managerial implications of the research findings and recommended practical interventions are also discussed.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1	INTRODUCTION	252
7.2	SUMMARY OF THE STUDY	252
7.2.1	Resolution of theoretical sub-problems.....	254
7.2.2	Resolution of empirical sub-problems.....	258
7.3	SUMMARY OF MAIN FINDINGS	261
7.3.1	Main findings pertaining to the descriptive research results.....	261
7.3.1.1	Section B: Psychological Recession.....	261
7.3.1.2	Section C: Positive HRM practices	262
7.3.1.3	Section D: PsyCap.....	263
7.3.2	Main findings pertaining to the inferential research results	263
7.3.2.1	Main findings pertaining to the correlation analysis	263
7.3.2.2	Main findings pertaining to SEM.....	265
7.3.2.3	Main findings pertaining to the multiple regression analysis	266
7.3.2.4	Main findings pertaining to the one-sample t-test	268
7.4	LIMITATIONS OF THE STUDY	270
7.4.1	Limitations of the literature review	270
7.4.2	Limitations of the empirical research	270
7.5	RECOMMENDATIONS.....	272
7.5.1	Recommendations for managers and HR practitioners	272
7.5.2	Recommendations for future research.....	277
7.6	CONTRIBUTION OF THE STUDY AND CONCLUSION.....	278

LIST OF TABLES

Table 7.1:	Summary of main findings pertaining to the correlation analysis	264
Table 7.2:	Summary of main findings pertaining to the SEM	266

Table 7.3: Summary of main findings pertaining to the multiple regression analysis..... 266

Table 7.4: Summary of main findings pertaining to the one-sample t-test .. 268

LIST OF FIGURES

Figure 7.1: Alignment between the main problem, research objectives and theoretical and empirical sub-problems 253

Figure 7.2: Alignment between the research objectives, theoretical sub-problems and the literature review 255

Figure 7.3: Alignment between the research objectives, empirical sub-problems, research questionnaire and hypotheses..... 259

Figure 7.4: Integration and alignment of the main problem, research objectives, theoretical and empirical sub-problems, literature review, research questionnaire, hypotheses and main findings 269

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

The purpose of this chapter is to draw conclusions, make recommendations, outline limitations and indicate future research areas. This chapter starts off with a summary of the study, with specific reference to the resolution of the theoretical and empirical sub-problems. Thereafter, the main findings pertaining to the descriptive and inferential results are summarised and discussed.

A summary, in the form of a flow diagram, is also included in this chapter to serve as a visual representation of the nexus between the objectives of the study, theoretical and empirical sub-problems, literature review, questionnaire, hypotheses and main findings. To conclude this chapter, a number of limitations of the study are presented in addition to recommendations for managers and future research.

7.2 SUMMARY OF THE STUDY

A flow diagram is depicted in Figure 7.1 to visually demonstrate the logical flow and consistency among the main problem, research objectives and theoretical and empirical sub-problems.

As can be seen in Figure 7.1, the main problem identified was:

Which HRM practices will best contribute to the development of PsyCap in employees during a psychological recession?

The rationale behind the study was to identify various positive HRM practices that contribute to the enhancement of PsyCap during a psychological recession. A psychological recession, defined as an emotional state in which people feel hopeless, defenceless, and anxious for their futures (Bardwick, 2008), could result in lower levels of PsyCap.

	RESEARCH OBJECTIVES	THEORETICAL AND EMPIRICAL SUB-PROBLEMS
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">MAIN PROBLEM</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Which HRM practices will best contribute to the development of PsyCap in employees during a psychological recession?</p>	<p>Investigate whether South Africans are exposed to a psychological recession.</p>	<p>How has South Africa been affected by the worldwide economic crisis and what are the associated social issues, which could contribute towards a psychological recession among South Africans? (Theoretical sub-problem one)</p>
		<p>What is the nature of a psychological recession and to what extent do South Africans experience a psychological recession? (Theoretical sub-problem two)</p>
		<p>To what extent is the target group experiencing the negative consequences associated with a psychological recession? (Empirical sub-problem one)</p>
	<p>Investigate whether a psychological recession negatively influences levels of PsyCap.</p>	<p>What are the negative consequences of a psychological recession for the economy, organisations and the individual? (Theoretical sub-problem three)</p>
		<p>What is the impact of a psychological recession on the target groups' PsyCap, and specifically their hope, self-efficacy, resilience, and optimism? (Empirical sub-problem two)</p>
	<p>Investigate whether HRM practices enhance employees' PsyCap.</p> <p>Investigate whether an optimal bundle of HRM practices that enhances employees' PsyCap can be identified.</p>	<p>What are the main components of PsyCap and how can organisations develop PsyCap? (Theoretical sub-problem four)</p>
		<p>Is there a relationship between HRM practices and the development of PsyCap? (Theoretical sub-problem five)</p>
		<p>How can specific HR strategies or interventions contribute towards the development of employees' PsyCap? (Theoretical sub-problem six)</p>
		<p>To what extent do selected HRM practices foster the development of the target groups' PsyCap? (Empirical sub-problem three)</p>
		<p>Which bundle of HRM practices positively influences the development of the target groups' PsyCap during a psychological recession? (Empirical sub-problem four)</p>
	<p>Investigate whether HRM practices serve as a buffer against negative experiences of a psychological recession.</p>	<p>Which bundle of HRM practices is most effective in buffering the negative impact of a psychological recession? (Theoretical sub-problem seven)</p>
		<p>Do HRM practices buffer negative experiences of a psychological recession? (Empirical sub-problem five)</p>

Figure 7.1: Alignment between the main problem, research objectives and theoretical and empirical sub-problems

While there has been no systematic study of the impact of various HRM interventions on PsyCap (Gupta, 2013), a need existed to investigate and formulate the best HRM practices necessary for the development and enhancement of PsyCap, during a psychological recession. Further to this, the study aimed to investigate the potential buffering effect of HRM practices on the negative experiences associated with a psychological recession.

As can be seen in Figure 7.1, five research objectives were formulated to support the main problem. Thereafter, seven theoretical and five empirical sub-problems were identified and aligned with the relevant research objective. A thorough review of the literature was presented in Chapters Two, Three and Four to address the seven theoretical sub-problems. The empirical data of the research project, the data analysis and interpretation of results in Chapter Six provided answers to the five empirical sub-problems.

The various actions undertaken to address each theoretical and empirical sub-problem are discussed in the following sections.

7.2.1 Resolution of theoretical sub-problems

The various actions undertaken to resolve the theoretical sub-problems are discussed in this section. Figure 7.2 provides a summary and illustration of the alignment between the main problem, research objectives and theoretical sub-problems, and each theoretical sub-problem's alignment with the literature review presented in Chapters Two, Three and Four. As can be seen in Figure 7.2, theoretical sub-problems one and two were formulated to address the first research objective, which was to investigate whether South Africans were exposed to a psychological recession.

To address **theoretical sub-problem one**, a literature survey was conducted and presented in Chapter Two to investigate and discuss the various socio-economic issues that contribute towards a psychological recession in South Africa.

MAIN PROBLEM <i>Which HRM practices will best contribute to the development of PsyCap in employees during a psychological recession?</i>	RESEARCH OBJECTIVES	THEORETICAL SUB-PROBLEMS	LITERATURE REVIEW
	Investigate whether South Africans are exposed to a psychological recession.	How has South Africa been affected by the worldwide economic crisis and what are the associated social issues, which could contribute towards a psychological recession among South Africans? (Theoretical sub-problem one)	Chapter 2 <i>The South African Socio-Economic Environment</i>
		What is the nature of a psychological recession and to what extent do South Africans experience a psychological recession? (Theoretical sub-problem two)	Chapter 3 <i>The Psychological Recession</i>
	Investigate whether a psychological recession negatively influences levels of PsyCap.	What are the negative consequences of a psychological recession for the economy, organisations and the individual? (Theoretical sub-problem three)	Chapter 3 <i>The Psychological Recession</i> Chapter 4 <i>Psychological Capital</i>
	Investigate whether HRM practices enhance employees' PsyCap.	What are the main components of PsyCap and how can organisations develop PsyCap? (Theoretical sub-problem four)	Chapter 4 <i>Psychological Capital</i>
		Is there a relationship between HRM practices and the development of PsyCap? (Theoretical sub-problem five)	
		How can specific HR strategies or interventions contribute towards the development of employees' PsyCap? (Theoretical sub-problem six)	
	Investigate whether an optimal bundle of HRM practices that enhances employees' PsyCap can be identified.		
Investigate whether HRM practices serve as a buffer against negative experiences of a psychological recession.	Which bundle of HRM practices is most effective in buffering the negative impact of a psychological recession? (Theoretical sub-problem seven)	Chapter 3 <i>The Psychological Recession</i>	

Figure 7.2: Alignment between the research objectives, theoretical sub-problems and the literature review

Chapter Two also provided a background of the global financial crisis and its negative impact on the South African economy. Chapter Two then further provided a detailed description and background of the South African social environment, by also discussing the various social issues which South Africans are continuously exposed to. These social issues included unemployment, labour unrest, student protest action at South African universities, poverty, crime, HIV/AIDS and unethical behaviour in the South African business world and government.

Recent statistics and articles in the media revealed that South Africans were exposed to a declining economy as a consequence of the 2007-2009 global economic recession, as well as a consequence of various social issues. As further discussed in Chapter Two, a compendium of negative news and poor perceptions of the country creates a spiral into a psychological recession, which was further demonstrated and discussed in Chapter Three.

To resolve **theoretical sub-problem two**, the underlying theoretical constructs of a psychological recession were considered and presented in Chapter Three. This delineation of a psychological recession also focused on the extent to which South Africans experienced its negative effects, such as work-related tension and psychological distress, organisational change and psychological uncertainty, work-family conflict, job insecurity, job loss, and unemployment. Relevant statistics obtained from the Department of Performance Monitoring and Evaluation's Development Indicators Report (2013), the FutureFact Psychographic Survey (2014), AON Hewitt's Trends in Global Employee Engagement Report (2014), and Gallup's study on the state of the global workplace (2013) provided evidence that a psychological recession was evident amongst the South African population during the period that the study was undertaken.

As depicted in Figure 7.2, **theoretical sub-problem three** was formulated to address the second research objective, which was to theoretically investigate whether a psychological recession negatively influences PsyCap.

Chapter Three provided a theoretical overview of the various consequences of a psychological recession for economies, organisations, and individuals. Based on the literature surveyed and presented in Chapter Three, it became clear that a psychological recession was evident during the period that this study was conducted, posing negative consequences for people, organisations and the economy.

On an individual level, a psychological recession negatively influences individuals' PsyCap. Literature reviewed in Chapter Four indicated that negative experiences associated with a psychological recession (i.e. work-family conflict, job insecurity, job loss and unemployment, organisational change and psychological uncertainty, and work-related tension and psychological distress) inhibit the development of employees' PsyCap.

On an organisational level, a psychological recession primarily has a negative influence on employee engagement, while in the larger economic picture, a psychological recession contributes to a negative outlook for consumer spending in South Africa, as well as negative GDP growth trends. Prolonged socio-economic hardships make people feel economically and psychologically vulnerable, and as a result, people reduce their spending on consumer goods due to a growing belief that the country could deteriorate further.

As can be seen in Figure 7.2, theoretical sub-problems four to six were formulated to address the third and fourth research objective, which was to investigate the positive influence of a selected optimal bundle of HRM practices on employees' PsyCap.

To resolve **theoretical sub-problems four, five and six**, literature was surveyed and presented in Chapter Four in which the nature and main components of PsyCap were investigated. Since PsyCap predominantly consists of four components, namely hope, self-efficacy, resilience, and optimism, these four components interdependently provide individuals with the capacity to manage adversity such as experienced during an economic and psychological recession.

The literature reviewed in Chapter Four also provided evidence that PsyCap can be increased and developed by means of organisational-level variables, such as positive HRM practices, and that positive HRM practices such as competence development, empowerment, information-sharing, recognition, and sophisticated recruitment, selection and induction practices, have the capacity to create a supportive organisational environment that is necessary for PsyCap to flourish and develop.

As can be seen in Figure 7.2, theoretical sub-problem seven was formulated to address research objective five, which was to investigate whether positive HRM practices serve as a buffer against a psychological recession. To resolve **theoretical sub-problem seven**, a literature survey was conducted and presented in Chapter Three to investigate the role of organisational-level variables, including HRM practices, in buffering the negative impact of a psychological recession on employees. From the literature surveyed in Chapter Three, it became evident that previous empirical studies support the notion that specific bundles of positive HRM practices have the potential to empower, re-engage and retain employees during a psychological recession.

7.2.2 Resolution of empirical sub-problems

The various actions that were undertaken to address each empirical sub-problem are discussed in this section. Figure 7.3 demonstrates the alignment between the research objectives, empirical sub-problems, research questionnaire and five hypotheses. The five hypotheses indicated in Figure 7.3 were formulated to state and predict the relationships between the variables depicted in the empirical sub-problems.

As can be seen in Figure 7.3, **empirical sub-problem one** relates to research objective one and was tested by means of hypothesis one. The primary purpose of empirical sub-problem one was to determine whether the research sample experienced the negative consequences associated with a psychological recession, with specific reference job insecurity, job loss and unemployment, organisational change and psychological uncertainty, work-family conflict, and work-related tension and psychological distress.

MAIN PROBLEM Which HRM practices will best contribute to the development of PsyCap in employees during a psychological recession?	RESEARCH OBJECTIVES	EMPIRICAL SUB-PROBLEMS	QUESTIONNAIRE	HYPOTHESES
	Investigate whether South Africans are exposed to a psychological recession.	To what extent is the target group experiencing the negative consequences associated with a psychological recession? (Empirical sub-problem one)	Section B <i>The Psychological Recession</i>	H ₁ : South African employees experience the negative effects of a psychological recession
	Investigate whether a psychological recession negatively influences levels of PsyCap.	What is the impact of a psychological recession on the target groups' PsyCap, and specifically their hope, self-efficacy, resilience, and optimism? (Empirical sub-problem two)	Section B <i>The Psychological Recession</i> Section D <i>Psychological Capital</i>	H ₂ : A psychological recession negatively influences employees' PsyCap
	Investigate whether HRM practices enhance employees' PsyCap.	To what extent do selected HRM practices foster the development of the target groups' PsyCap? (Empirical sub-problem three)	Section C <i>HRM Practices</i> Section D <i>Psychological Capital</i>	H ₃ : HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism.
	Investigate whether an optimal bundle of HRM practices that enhances employees' PsyCap can be identified.	Which bundle of HRM practices positively influences the development of the target groups' PsyCap during a psychological recession? (Empirical sub-problem four)		H ₄ : A bundle of HRM practices that enhances PsyCap can be identified.
Investigate whether HRM practices serve as a buffer against negative experiences of a psychological recession.	Do HRM practices buffer negative experiences of a psychological recession? (Empirical sub-problem five)	Section B <i>The Psychological Recession</i> Section C <i>HRM Practices</i>	H ₅ : HRM practices buffer experiences of the negative impact of a psychological recession.	

Figure 7.3: Alignment between the research objectives, empirical sub-problems, research questionnaire and hypotheses

To resolve empirical sub-problem one, a survey with a questionnaire as data collection tool was conducted. Section B of the questionnaire addressed this empirical sub-problem as it measured the extent to which the respondents experienced the negative experiences associated with a psychological recession. The results were then analysed by means of descriptive and inferential statistical analysis. Figure 7.6 demonstrates the alignment between research objective two, empirical sub-problem two and hypotheses two. To solve **empirical sub-problem two**, Section D of the questionnaire measured respondents' overall level of PsyCap, as well as the four PsyCap dimensions (i.e. hope, self-efficacy, resilience and optimism).

Inferential statistical analysis, such as Pearson's product moment correlation analysis, SEM and multiple regression analysis were employed to determine the influence of respondents' experiences of a psychological recession (Section B of the questionnaire) on their level of PsyCap.

As can be seen in Figure 7.3, **empirical sub-problem three and four** relate to hypotheses three and four. These two sub-problems were addressed through Section C and D of the questionnaire. Inferential statistical techniques, such as Pearson's product moment correlation analysis, SEM and multiple regression were used to determine the influence of various positive HRM practices (Section C of the questionnaire) on respondents' level of PsyCap (Section D).

The inferential analysis also revealed significant HRM practices which contributed most towards the development and enhancement of respondents' PsyCap, thus identifying an optimal bundle of HRM practices that positively influence the development of employees' PsyCap.

As depicted in Figure 7.3, **empirical sub-problem five** corresponds with hypothesis five. This sub-problem was addressed in Section B and D of the questionnaire. Inferential statistical techniques, such as Pearson's product moment correlation analysis, SEM and multiple regression were used to measure the influence of the various positive HRM practices (Section C) on the negative experiences of a psychological recession (Section B).

The inferential statistical techniques also revealed the most significant HRM practices necessary to weather the negative experiences associated with a psychological recession.

A summary of all the main findings obtained pertaining to the descriptive and inferential research results is provided in the following section.

7.3 SUMMARY OF MAIN FINDINGS

This section provides a summary of all the main findings as formulated in the empirical study. The main findings from the descriptive results are presented first, followed by the main findings from the inferential results of the Pearson correlation analysis, SEM results and multiple regression analysis.

7.3.1 Main findings pertaining to the descriptive research results

The findings pertaining to the descriptive results are summarised according to the three initial main constructs of the conceptual model as portrayed and measured in the questionnaire, namely psychological recession (Section B); positive HRM practices (Section C); and PsyCap (Section D).

7.3.1.1 Section B: Psychological Recession

Regarding scores on psychological recession and its dimensions, a relatively low percentage of respondents (between 17% and 28%) indicated personal exposure and vulnerability concerning job insecurity, job loss and unemployment. However, neutral responses for this subscale varied between 14% and 30%, which indicates a degree of uncertainty about future employment.

Pertaining to perceptions of work-family conflict, responses to this subscale were quite dispersed across the Likert scale, but still showed a tendency towards positive perceptions. Regarding organisational change and psychological uncertainty, between 13% and 33% of the respondents indicated that they experienced personal exposure and vulnerability to this dimension of a psychological recession. However, the number of neutral responses, ranging between 24% and 36% also indicated a degree of psychological uncertainty.

Between 37% and 44% of the respondents experienced a relatively high level of work-related tension and psychological distress. However, the number of neutral responses (varying between 20% and 35%) could indicate fluctuation between work-related tension and psychological distress, and feelings of well-being.

7.3.1.2 Section C: Positive HRM practices

The results indicated that responses relating to the organisation's recognition practices showed a trend towards negative perceptions/evaluations (50% negative perceptions/evaluations). With regard to the organisation's empowerment practices, responses were relatively equally spread between negative, neutral and positive perceptions/evaluations.

However, almost half of the respondents reported positive perceptions/evaluations of their organisation's competence development practices, while respondents tended to have mostly negative perceptions/evaluations of their organisation's fair reward practices (59% negative perceptions/evaluations). Regarding information-sharing practices, responses were mostly spread across negative, neutral and positive perceptions/evaluations.

However, overall mean scores for five of the six positive HRM practices indicated a tendency towards neutral responses for recognition practices, empowerment practices, competence development practices, information-sharing practices, and employee wellness practices. Fair rewards practices obtained the lowest aggregate mean score, therefore indicating that respondents negatively perceived/evaluated this particular HRM practice.

To summarise this section, the mostly negative and overall neutral responses in this section cast doubt on whether adequate and sound HRM practices were applied. Furthermore, the above findings indicate that respondents were mostly dissatisfied with the organisation's fair rewards practices and the provision of recognition.

7.3.1.3 Section D: PsyCap

Regarding PsyCap and its four dimensions, high scores were obtained indicating that the respondents experienced high levels of PsyCap. The responses were slightly negatively skewed, suggesting a tendency towards high levels of PsyCap. Such a perception is to be expected and welcomed in primary healthcare, as PsyCap is crucial in the public health sector where the job is demanding and the patient is also typically demanding as a customer due to his or her health needs.

One reason for the negative skewness of the responses may also be related to the concept of social desirability. The researcher attempted to decrease social desirability by informing respondents that the information they provided were confidential and that their organisation would not have access to their individual scores.

The following section provides a summary of the main findings obtained from the inferential results.

7.3.2 Main findings pertaining to the inferential research results

The findings pertaining to the inferential results are summarised according to the hypotheses formulated and tested through Pearson's product moment correlation analysis, SEM, multiple regression analysis, and the one-sample t-test.

7.3.2.1 Main findings pertaining to the correlation analysis

The purpose of this section is to summarise the main findings pertaining to the hypotheses formulated and tested through correlation analysis.

Table 7.1 provides a summary of the main findings derived from each of the formulated hypotheses.

Table 7.1: Summary of main findings pertaining to the correlation analysis

<p>HYPOTHESIS 2</p> <p><i>A psychological recession negatively influences employees' PsyCap</i></p>
<ol style="list-style-type: none"> 1) The results of a Pearson's correlation analysis revealed that all facets of a psychological recession were significantly and negatively associated with PsyCap and its respective dimensions, therefore suggesting that negative experiences associated with a psychological recession are associated with lower levels of PsyCap. 2) There is a practically significant inverse correlation between the total scores for psychological recession and PsyCap, exhibiting a large effect size or strength. 3) With regard to the relationship between the four psychological recession dimensions and PsyCap, the highest negative correlation was observed between organisational change and psychological uncertainty and the total score for PsyCap, exhibiting a strong effect size or strength. 4) When reflecting on the relationships between the four psychological recession dimensions and two PsyCap dimensions, the highest negative correlation was observed between organisational change and psychological uncertainty and hopeful confidence. 5) Both PsyCap factors (i.e. hopeful confidence and positive outlook) exhibited strong inverse correlations with the total score for psychological recession. The highest negative correlation was observed between the total score for psychological recession and hopeful confidence.
<p>HYPOTHESIS 3</p> <p><i>HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism</i></p>
<p>HYPOTHESIS 4</p> <p><i>A bundle of HRM practices that enhances PsyCap can be identified</i></p>
<ol style="list-style-type: none"> 6) The results of a Pearson's correlation analysis revealed that all five HRM practices were significantly and positively associated with PsyCap and its respective dimensions, therefore suggesting that HRM practices in general create an organisational environment conducive to the development of PsyCap. 7) There is a practically significant positive correlation between the total scores for HRM practices and PsyCap, exhibiting a medium effect size or strength. 8) Regarding the relationship between the five HRM practices and overall PsyCap, the highest positive correlation was observed between competence development practices and the total score for PsyCap, exhibiting a medium effect size or strength. 9) When reflecting on the relationships between the five HRM practices and two PsyCap dimensions, the highest positive correlation was observed between competence development practices and hopeful confidence.

Table 7.1 (continued): Summary of main findings pertaining to the correlation analysis

<p>HYPOTHESIS 3</p> <p><i>HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism</i></p>
<p>HYPOTHESIS 4</p> <p><i>A bundle of HRM practices that enhances PsyCap can be identified</i></p>
<p>10) Both PsyCap factors (i.e. hopeful confidence and positive outlook) showed a moderate to strong positive relationship with the total score for HRM practices. The highest positive correlation was observed between the total score for HRM practices and hopeful confidence.</p>
<p>HYPOTHESIS 5</p> <p><i>HRM practices buffer experiences of the negative impact of a psychological recession</i></p>
<p>11) The correlation analysis revealed that all five HRM practices were significantly and negatively related to the four dimensions of a psychological recession, therefore suggesting that HRM practices have the potential to reduce the negative experiences associated with a psychological recession.</p> <p>12) There is a practically significant inverse relationship between HRM practices (total score) and psychological recession (total score), exhibiting a large effect size or strength between these two variables.</p> <p>13) Concerning the relationship between the five HRM practices and the total score for psychological recession, the highest negative correlation was observed between recognition-empowerment practices and the total score for psychological recession, exhibiting a large effect size or strength.</p> <p>14) When reflecting on the relationships between the five HRM practices and four dimensions of a psychological recession, the highest negative correlation was observed between competence development practices and job insecurity, job loss and unemployment.</p> <p>15) The four dimensions of a psychological recession exhibited moderate to strong negative relationships with the total score for HRM practices, with the highest correlation observed between job insecurity, job loss and unemployment and the total score for HRM practices.</p>

7.3.2.2 Main findings pertaining to SEM

The purpose of this section is to summarise the main findings pertaining to the hypotheses formulated and tested through SEM. This summary in Table 7.2 includes the main findings derived from each of the formulated hypotheses. The SEM provided additional support for the relationships depicted between the variables stated in hypotheses two to five.

Table 7.2: Summary of main findings pertaining to the SEM

HYPOTHESIS 2 <i>A psychological recession negatively influences employees' PsyCap</i>
16) A psychological recession has a significant negative influence on PsyCap, exhibiting a medium effect size or strength.
HYPOTHESIS 3 <i>HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism</i>
HYPOTHESIS 4 <i>A bundle of HRM practices that enhances PsyCap can be identified</i>
17) HRM practices have a significant positive influence on PsyCap, exhibiting a medium effect size or strength.
HYPOTHESIS 5 <i>HRM practices buffer experiences of the negative impact of a psychological recession</i>
18) HRM practices have a significant negative influence on a psychological recession, exhibiting a large effect size or strength.

7.3.2.3 Main findings pertaining to the multiple regression analysis

The purpose of this section is to summarise the main findings pertaining to the hypotheses formulated and tested through multiple regression analysis.

This summary is reflected in Table 7.3 and includes the main findings derived from each of the formulated hypotheses.

Table 7.3: Summary of main findings pertaining to the multiple regression analysis

HYPOTHESIS 2 <i>A psychological recession negatively influences employees' PsyCap</i>
19) There is a significant inverse relationship between the total scores for psychological recession and PsyCap. The results indicate that 37% of the variance in PsyCap is explained by the psychological recession, therefore suggesting that personal exposure and vulnerability regarding a psychological recession may negatively influence overall PsyCap.

Table 7.3 (continued): Summary of main findings pertaining to the multiple regression analysis

<p>HYPOTHESIS 2</p> <p><i>A psychological recession negatively influences employees' PsyCap</i></p>
<p>20) When the four psychological recession dimensions were regressed onto overall PsyCap, an analysis of the standardised beta coefficients suggests that organisational change and psychological uncertainty made the strongest significant contribution to explaining PsyCap.</p> <p>21) When the four psychological recession dimensions were regressed onto the two PsyCap factors (i.e. hopeful confidence and positive outlook), the dimension "organisational change and psychological uncertainty" explained the most variance in both hopeful confidence and positive outlook.</p>
<p>HYPOTHESIS 3</p> <p><i>HRM practices positively influence employees' PsyCap, and specifically their hope, self-efficacy, resilience and optimism</i></p>
<p>HYPOTHESIS 4</p> <p><i>A bundle of HRM practices that enhances PsyCap can be identified</i></p>
<p>22) There is a significant positive relationship between HRM practices and PsyCap. The results indicate that HRM practices accounted for 22% of the variance observed in PsyCap, therefore suggesting that HRM practices have a significant positive influence on the development of PsyCap.</p> <p>23) When the five HRM practices were regressed onto overall PsyCap, an analysis of the standardised beta coefficients suggests that competence development practices made the greatest significant contribution in explaining overall PsyCap.</p> <p>24) Employee wellness practices and competence development practices were the only two significant HRM practices that contributed to the variance of hopeful confidence, with employee wellness practices making the largest contribution.</p> <p>25) An analysis of beta values indicated that competence development was the only significant predictor of positive outlook, and also contributed the most to the variance of positive outlook.</p>
<p>HYPOTHESIS 5</p> <p><i>HRM practices buffer experiences of the negative impact of a psychological recession</i></p>
<p>26) There is a significant inverse relationship between HRM practices and a psychological recession. HRM practices predicted 41% of the variance in the psychological recession, therefore suggesting that HRM practices have an important role to play in buffering a psychological recession.</p> <p>27) When the five HRM practices were regressed onto the psychological recession as dependent variable, an analysis of the standardised beta coefficients suggests that recognition-empowerment made the greatest significant contribution in explaining the variance in the psychological recession.</p>

Table 7.3 (continued): Summary of main findings pertaining to the multiple regression analysis

HYPOTHESIS 5
<i>HRM practices buffer experiences of the negative impact of a psychological recession</i>
<p>28) When reflecting on whether any of the five HRM practices played a role in predicting the four psychological recession factors, the regression summary indicated the following:</p> <ul style="list-style-type: none"> • Recognition-empowerment practices made the largest unique contribution to explaining work-family conflict, organisational change and psychological uncertainty, and work-related tension and psychological distress; and • Competence-development practices made the greatest contribution in explaining job insecurity, job loss and unemployment.

7.3.2.4 Main findings pertaining to the one-sample t-test

The purpose of this section is to summarise the main findings pertaining to hypothesis one that was tested through a one-sample t-test. Hypothesis one related to whether South African employees experienced the negative effects associated with a psychological recession. This summary is reflected in Table 7.4 and includes the main findings derived from hypothesis one.

Table 7.4: Summary of main findings pertaining to the one-sample t-test

HYPOTHESIS 1
<i>South African employees experience the negative effects of a psychological recession</i>
<p>29) Although, based on the descriptive statistics of the study, all respondents included in the analysis experienced some degree of a psychological recession, the one-sample t-test revealed that respondents, as a whole, were neutral in terms of their perceptions of experiencing a psychological recession.</p>

To conclude this section, a flow diagram is presented in Figure 7.4 which provides an integrated model of the links between the main problem, research objectives, theoretical and empirical sub-problems, literature review, research questionnaire, hypotheses, and their alignment with the main findings as summarised chronologically in section 7.3.2, to provide a holistic view of how the research objectives of the study were met.

	RESEARCH OBJECTIVES	THEORETICAL AND EMPIRICAL SUB-PROBLEMS	LITERATURE REVIEW	QUESTIONNAIRE	HYPOTHESES	MAIN FINDINGS	
MAIN PROBLEM <i>Which HRM practices will best contribute to the development of PsyCap in employees during a psychological recession?</i>	Investigate whether South Africans are exposed to a psychological recession.	How has South Africa been affected by the worldwide economic crisis and what are the associated social issues, which could contribute towards a psychological recession among South Africans? (Theoretical sub-problem one)	Chapter 2 <i>The South African Socio-Economic Environment</i>				
		What is the nature of a psychological recession and to what extent do South Africans experience a psychological recession? (Theoretical sub-problem two)	Chapter 3 <i>The Psychological Recession</i>				
		To what extent is the target group experiencing the negative consequences associated with a psychological recession? (Empirical sub-problem one)		Section B <i>The Psychological Recession</i>	Hypothesis 1 <i>South African employees experience the negative effects of a psychological recession</i>	Main finding 29	
	Investigate whether a psychological recession negatively influences levels of PsyCap.	What are the negative consequences of a psychological recession for the economy, organisations and the individual? (Theoretical sub-problem three)	Chapter 3 & 4 <i>The Psychological Recession; Psychological Capital</i>				
		What is the impact of a psychological recession on the target groups' PsyCap, and specifically their hope, self-efficacy, resilience, and optimism? (Empirical sub-problem two)		Section B & D <i>The Psychological Recession; Psychological Capital</i>	Hypothesis 2 <i>A psychological recession negatively influences employees' PsyCap</i>	Main findings 1-5; 16; 19-21	
	Investigate whether HRM practices enhance employees' PsyCap.	What are the main components of PsyCap and how can organisations develop PsyCap? (Theoretical sub-problem four)	Chapter 4 <i>Psychological Capital</i>				
		Is there a relationship between HRM practices and the development of PsyCap? (Theoretical sub-problem five)					
		How can specific HR strategies or interventions contribute towards the development of employees' PsyCap? (Theoretical sub-problem six)					
		Investigate whether an optimal bundle of HRM practices that enhances employees' PsyCap can be identified.	To what extent do selected HRM practices foster the development of the target groups' PsyCap? (Empirical sub-problem three)		Section C <i>HRM Practices</i>	Hypothesis 3 <i>HRM practices positively influence employees' PsyCap</i>	Main findings 6-10; 17; 22-25
			Which bundle of HRM practices positively influences the development of the target groups' PsyCap during a psychological recession? (Empirical sub-problem four)		Section D <i>Psychological Capital</i>	Hypothesis 4 <i>A bundle of HRM practices that enhances PsyCap can be identified</i>	
	Investigate whether HRM practices serve as a buffer against negative experiences of a psychological recession.	Which bundle of HRM practices is most effective in buffering the negative impact of a psychological recession? (Theoretical sub-problem seven)	Chapter 3 <i>The Psychological Recession</i>				
		Do HRM practices buffer negative experiences of a psychological recession? (Empirical sub-problem five)		Section B & C <i>The Psychological Recession; HRM Practices</i>	Hypothesis 5 <i>HRM practices buffer experiences of the negative impact of a psychological recession</i>	Main findings 11-15; 18; 26-28	

Figure 7.4: Integration and alignment of the main problem, research objectives, theoretical and empirical sub-problems, literature review, research questionnaire, hypotheses and main findings

7.4 LIMITATIONS OF THE STUDY

All research studies have inherent limitations, and it is critical to evaluate the possible limitations of the study, so as to ensure that the research is examined from all perspectives. Limitations, as described by Burns and Grove (2005), is a theoretical and/or methodological restriction of a research project, which may decrease the credibility and the general idea of the findings. Polit, Beck and Hungler (2001) explained limitations as the shortcomings, conditions, or influences that cannot be controlled by the researcher.

In the following sections, the situations and circumstances which might have affected or restricted the methods and analysis of research data are discussed.

7.4.1 Limitations of the literature review

As “psychological recession” is a relatively new construct, very little research has been done on this concept. The researcher therefore had to rely on research related to a psychological recession, but which focused on current socio-economic factors negatively affecting South Africans’ psychological state. In addition, to the researcher’s best knowledge, very little research has been done on the influence of various HRM practices on the development of PsyCap, the negative influence of a psychological recession on employees’ PsyCap, as well as the role of positive HRM practices in buffering the negative effects of a psychological recession. The research therefore called for a more pioneering or exploratory approach to the study.

7.4.2 Limitations of the empirical research

In research, it is acknowledged that personal circumstances, such as emotions, fatigue, and health could influence responses. In addition, distractions and time pressures at work, can also affect responses. The researcher was particularly aware of these issues, as working conditions at PHC facilities are often stressful due to high patient workloads. Respondents were also working long hours and under time pressure, which may have influenced their responses. For this reason, the researcher extended the survey, with the hope of alleviating some of the pressures experienced by these respondents and providing them with additional time to complete the questionnaire.

Since the current study was cross-sectional by design, causality cannot be assumed or proven. These results must be considered prudently. For future research, longitudinal quasi-experimental studies may be useful to demonstrate causality.

The results of this study are limited to fixed PHC clinics, and subsequently cannot automatically be generalised to all types of healthcare facilities, such as community health centres, district hospitals, provincial tertiary hospitals, regional hospitals and specialised hospitals. Furthermore, the results cannot be generalised to other geographical regions as the results are limited to the West Rand District Municipality of the Gauteng Province of South Africa.

The study was conducted on a target group consisting of specific employment categories (i.e. HRH categories) at fixed PHC clinics. Other types of healthcare facilities, such as community health centres and hospitals that offer a more comprehensive range of medical services compared to that offered by a fixed PHC clinic, might require different HRH. The results of this study are therefore only applicable to the six core HRH categories included in the target population (i.e. facility operational managers, professional nurses/CNPs, enrolled nurses, lay counsellors, admin clerks/data capturers, and pharmacy assistants).

Lastly, the self-administered questionnaires used in this study are seen as another limitation in the sense that it presents the possibility of imprecise answers, provision of erroneous responses, and the skipping of sections in the questionnaire without respondents knowing. Despite the above limitations, no major problems were experienced during the duration of the study. Minor problems were related to the administration of the questionnaire and specifically to obtaining an adequate number of responses. This problem was overcome by weekly follow-up reminders. The eventual high response rate that was obtained and members from the district management team who indicated that they would like to receive a summary of the results demonstrated that the survey was positively received by the target population.

7.5 RECOMMENDATIONS

The following recommendations are made in light of the research findings as presented in section 7.3. These recommendations are directed towards management and HR practitioners in health care services that are responsible for crafting effective HRM practices to support human development and excellence.

7.5.1 Recommendations for managers and HR practitioners

The recommendations formulated for each research objective are presented in this section.

RESEARCH OBJECTIVE ONE

Investigate whether South Africans are exposed to a psychological recession

Although the inferential statistics revealed that respondents mostly provided neutral scores in terms of their perceptions of experiencing a psychological recession, the descriptive results indicated that all respondents, to a certain degree, experienced the negative experiences associated with a psychological recession.

The negative consequences caused by a psychological recession are likely to remain widespread in organisations for as long as South Africans are exposed to a declining socio-economic environment. This is especially relevant to PHC staff, since these employees are often exposed to stressful and unsupportive working environments characterised by critical staff shortages, high patient workloads, poorly equipped working environments, and the prevalence of HIV/AIDS (Van Rensburg, 2014).

Organisations should therefore take notice of these results and understand that a psychological recession is a real phenomenon with real consequences for the wellness and psychological welfare of their employees.

RESEARCH OBJECTIVE TWO

Investigate whether a psychological recession negatively influences levels of PsyCap

The “doom and gloom” caused by a declining socio-economic environment contributes to feelings of despair, as news of failing organisations and staff retrenchments manifests itself in employees becoming more anxious, stressed, vulnerable, less innovative at work, and adopting a negative and cynical view of the present, and a bleaker view of the future. These behaviours all form part of a psychological recession (Bardwick, 2008). In this study, it was proposed that a psychological recession may inhibit the development of employees’ PsyCap. The inferential results indicated that a psychological recession has a significant negative influence on employees’ PsyCap.

Although significant correlations were uncovered between the psychological recession and PsyCap, **organisational change and psychological uncertainty** was identified as a major factor that negatively affected PHC employees’ overall PsyCap, including hope, confidence and future outlook (hopeful confidence and positive outlook). This finding is especially relevant to this study as the South African public health sector operates in a demanding environment that is characterised by constant change. For example, the South African public health sector faces continuous challenges such as a shortage of resources and inadequate employment levels that are persisting in most places in South Africa. These challenges resulted in policy reform and commitment from government to strengthen the health system and reduce inequalities (Isaacs, 2015). The results also imply that organisations should be cautious about how they introduce change in organisations by following best practices in change management. For example, care should be taken to explain the reasons for change and employees should be involved in the process of change. Organisations should consider strategies, as suggested in this study, to reduce the negative effect of change and uncertainty on employees’ PsyCap.

Communication of change should be done with empathy and come from credible sources to reduce uncertainty.

To conclude this section, organisations should maximise the role of positive behaviour in organisational change by actively focusing on the development of PsyCap in the workplace. Furthermore, if a psychological recession continues to be part of organisational life, then the challenge for managers is to learn to successfully navigate and control a psychological recession in a way that protects the PsyCap of employees.

RESEARCH OBJECTIVE THREE

Investigate whether HRM practices enhance employees' PsyCap.

RESEARCH OBJECTIVE FOUR

Investigate whether an optimal bundle of HRM practices that enhances employees' PsyCap can be identified.

The mostly negative and neutral responses obtained from the descriptive analysis cast doubt whether the organisation applied adequate and sound HRM practices to enhance employees' PsyCap. Based on the inferential results, positive HRM practices such as recognition-empowerment, competence development, fair rewards, information-sharing and employee wellness practices were found to contribute positively to the development of PsyCap and negate the negative impact of a psychological recession.

Based on the above findings, and to develop the PsyCap of employees, organisations should therefore (a) allow employees to enjoy increased autonomy when they perform their jobs; (b) invest in their growth and development; (c) share information with employees on aspects such as the organisation's financial performance, operational measures and strategy; (d) carefully consider employees' suggestions, appreciate quality work and achievements; and (e) reward employees fairly, equitably, and consistently in accordance with their value to the organisation.

The inferential results identified **competence development practices** as a crucial intervention for the development and enhancement of employees' PsyCap. Several studies have highlighted training and development as a critical intervention for the enhancement of positive employee behaviours such as job satisfaction, engagement and organisational commitment (Aybas & Cevat, 2017; Gupta, 2013; Kirke, 2012; Matsaung, 2014; Zahra, Iram & Naeem, 2014).

Competence development practices could enhance the empowerment of employees and give them greater self-efficacy in terms of dealing with adversity. This could be because the practices do not only equip employees with competencies and skills, but at the same time provide them with information that they could use to their benefit. It could, in fact, demonstrate the inherent value of employees if organisations consider it worthwhile to develop employees, therefore strengthening employees' belief that they will be able to cope. Furthermore, training and development show employees that the organisation's leadership considers them an asset to the organisation rather than a cost.

Based on the above findings it is therefore recommended that organisations should actively pay attention to managing employees' PsyCap through various HRM interventions and practices. Furthermore, organisations should increase training and development programmes, especially during difficult socio-economic times, as training is not only beneficial to the individual employees' PsyCap, but also to the long-term health of the organisation (Griego, Geroy & Wright, 2000).

These training interventions should entail professional development activities (e.g. coaching, mentoring, formal training programmes, job rotation), and proficiency courses, such as specialised technical courses and professional certifications specifically aimed at people in health care.

RESEARCH OBJECTIVE FIVE

Investigate whether HRM practices serve as a buffer against negative experiences of a psychological recession.

In this study, specific HRM practices were identified as interventions to assist with the management of the negative impact of a psychological recession. Based on the inferential statistics, it is therefore recommended that organisations should adopt and deploy various positive HRM practices that will help employees withstand the negative experiences associated with a psychological recession. Based on the results obtained from the Pearson correlation analysis and multiple regression, **recognition-empowerment practices** were identified as crucial practices to negate the negative impact of a psychological recession.

Bardwick (2008) identifies employee recognition as an important factor to buffer a psychological recession. According to Bardwick (2008) a psychological recession increases fear and anxiety, while reducing joy and optimism. Although success and recognition generate positive attitudes and energy, failure and non-recognition deplete and exhaust employees, therefore perpetuating a psychological recession. Furthermore, a lack of actions to increase employees' feelings of being valued leave people feel devalued and insignificant. Based on the findings of this study, organisations should therefore manage employees' success by implementing recognition programmes that are both contingent upon performance, and customised to what matters most to the individual employee (Bardwick, 2008).

Furthermore, when employees feel empowered to act and make decisions at work, they are energised to perform at a higher level (Bardwick, 2008). According to Herzberg (1968), granting employees authority and providing them with more autonomy satisfy their needs for personal achievement and recognition.

Interestingly, **competence development practices** were identified as an important buffer to negate experiences related to job insecurity, job loss and unemployment. According to Fiorito, Bozeman, Young and Meurs (2007) investments in training and development may have the potential to alleviate perceptions of job insecurity, since employees perceive employer investments in training as symbolic of continued employment. Organisations therefore need to invest in various staff training and development interventions to reduce negative perceptions of job insecurity that could influence engagement, performance, attitude and ultimately patient care.

7.5.2 Recommendations for future research

The following recommendations are made for future research:

- From the literature review it was evident that limited studies were done on the influence of HRM practices on the development of PsyCap, the negative influence of a psychological recession on employees' PsyCap, as well as the influence of HRM practices on a psychological recession. It is therefore recommended to do further research on this topic on a broader sample range within a South African context.
- The sample for the present study only included specific employment categories at fixed PHC clinics. The research could be expanded to include other employment categories and larger healthcare facilities.
- This study was restricted to the public health sector. Similar studies could be conducted in other industries/sectors.
- It is advisable to conduct a longitudinal study which should take place over a few months or even years. The current study was a cross-sectional one, which means that these results should be interpreted with caution. By doing such a study over an extended period of time, one might eventually be able to point to causality.
- The present study should be cross-validated in South Africa, as well as other countries, as these results present limited information on the relationships between PsyCap, positive HRM practices and a psychological recession. Further exploration of these constructs is required in the South African context.

The results of this study should be interpreted in terms of the limitations. The researcher hope that future research may replicate the current findings in various organisations, industries, and countries.

7.6 CONTRIBUTION OF THE STUDY AND CONCLUSION

This study highlighted the practical importance of HRM practices in developing the PsyCap of employees during a psychological recession. The present study suggests that the negative experiences of a psychological recession can be reduced when organisations are actively paying attention to the development of employees' PsyCap, by applying various positively-oriented HRM activities and practices. South Africa is in much need of input on positive organisational behaviour and it is evident that this study has given new insights into constructs which have not been studied together in this country. As far as it could be ascertained these three constructs have not been included in a single study in South Africa, as yet. The research made the following contribution to industrial psychology as a science:

- A standardised measuring instrument for assessing employees' exposure to a psychological recession, which has been proven valid and reliable, was developed.
- The development of a bundle of positive HR interventions to enhance employees' PsyCap during a psychological recession, leading to individual and organisational wellness.
- Scientific information on the relationship between HRM practices and PsyCap, HRM practices and a psychological recession, and a psychological recession and PsyCap will be valuable in the development of strategies to manage talent and performance.

The results of this study act as a supplement to the growing body of research on POB in general and for South Africa in particular. While the results point to interesting findings regarding the relationships between the three main variables in the study which will add to the literature on the topic, it is hoped that organisations and their HR departments will take heed of this valuable information.

Providing employees with an environment that enhances their hope, optimism, resilience and self-efficacy will potentially lead to employees who are engaged in their work.

A psychological recession is likely to remain widespread in organisations as long as South Africans are exposed to a declining socio-economic environment. By effectively managing a psychological recession through various positively-oriented HRM practices, organisations will be able to replace anxiety and fear with a sense of hope for a better future.

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ANNEXURE A: QUESTIONNAIRE

SECTION A - BIOGRAPHICAL INFORMATION

Please mark the appropriate box with an "X"

Gender	Male	Female				
Ethnicity	African	Asian	Coloured	Indian	White	
Employment	Permanent	Contract	Age			
Please select your employee category	Operational Manager	Professional Nurse/CNP	Enrolled Nurse	Lay Counsellor	Admin Clerk/Data Capturer	Pharmacy Assistant
Marital status	Single	Cohabiting	Married	Divorced	Widow/Widower	

In the sections below, please indicate to what extent you agree with each of the statements below by circling the most appropriate option.

Use the scale 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree.

Note that there are no right or wrong answers; your responses should reflect your perceptions. Don't skip any items and give only one response only per item.

SECTION B - THE PSYCHOLOGICAL RECESSION SCALE

B1: JOB INSECURITY, JOB LOSS AND UNEMPLOYMENT

B1.1	I expect to continue in my current job for a long time.	1	2	3	4	5
B1.2	The chance that I will become unemployed is very small.	1	2	3	4	5
B1.3	My job environment is stable and I know what to expect in terms of my job.	1	2	3	4	5
B1.4	I feel my organisation is well enough established to provide me with job security.	1	2	3	4	5
B1.5	I feel my job is safe even if the economy is unstable.	1	2	3	4	5
B1.6	I feel my chances of being retrenched are very low.	1	2	3	4	5

B2: WORK-FAMILY CONFLICT

B2.1	My work schedule enables me to have enough time with my family.	1	2	3	4	5
B2.2	After work, I come home with enough energy to do some of the things I would like to do.	1	2	3	4	5
B2.3	My workload allows me to pursue other interests as well.	1	2	3	4	5
B2.4	My family is supportive of me when I choose to work at home.	1	2	3	4	5
B2.5	Although my work is demanding, I manage to stay in a pleasant mood when I am at home.	1	2	3	4	5
B2.6	The demands of my job is at a level that enables me to relax when I am at home.	1	2	3	4	5

B2.7	My job enables me to spend enough time with my family.	1	2	3	4	5
B2.8	My job makes it possible for me to be the kind of spouse or parent that I'd like to be.	1	2	3	4	5

B3: ORGANISATIONAL CHANGE AND PSYCHOLOGICAL UNCERTAINTY

B3.1	My organisation has a good track record for retaining people rather than retrenching them.	1	2	3	4	5
B3.2	My company is relatively stable.	1	2	3	4	5
B3.3	I experience stability in my job.	1	2	3	4	5
B3.4	I am able to predict how my work environment will change.	1	2	3	4	5
B3.5	Normally I am confident in responding to changes in my workplace.	1	2	3	4	5
B3.6	Normally, I know how change will impact my work unit.	1	2	3	4	5

B4: WORK-RELATED TENSION AND PSYCHOLOGICAL DISTRESS

B4.1	My job enables me to maintain my health.	1	2	3	4	5
B4.2	My job is relatively free of tension.	1	2	3	4	5
B4.3	I feel relaxed and confident in my job.	1	2	3	4	5
B4.4	Should I take up a different job, the level of my health will most likely stay the same and not improve.	1	2	3	4	5
B4.5	I sleep well at night without worrying about problems associated with my job.	1	2	3	4	5
B4.6	I feel relaxed when I have to attend meetings in the company.	1	2	3	4	5
B4.7	When I am at home and busy with other things, I do not think about my job.	1	2	3	4	5

SECTION C: POSITIVE HRM PRACTICES

C1: RECOGNITION PRACTICES

C1.1	Employees' suggestions are taken seriously.	1	2	3	4	5
C1.2	In my work unit, employees' suggestions are followed up regularly.	1	2	3	4	5
C1.3	When an employee does good quality work it is appreciated by colleagues.	1	2	3	4	5
C1.4	In my work unit, supervisors tangibly recognise employees' efforts in different ways (e.g. tickets for cultural or sports events; dinners at restaurants).	1	2	3	4	5
C1.5	In my work unit, employees receive written recognition from their supervisors (e.g. by means of memos or email).	1	2	3	4	5
C1.6	In my work unit, supervisors regularly congratulate employees in recognition of their efforts.	1	2	3	4	5

C2: EMPOWERMENT PRACTICES

C2.1	Employees are given the right to make decisions about their work.	1	2	3	4	5
C2.2	Employees in my work unit have much autonomy in how they manage projects.	1	2	3	4	5
C2.3	In my work unit, employees have considerable freedom regarding the way they carry out their work.	1	2	3	4	5

C2.4	Employees are encouraged to self-manage and self-lead.	1	2	3	4	5
C2.5	In my organisation, employees feel empowered to participate as far as practically possible.	1	2	3	4	5
C3: COMPETENCE DEVELOPMENT PRACTICES						
C3.1	Employees can develop their skills in order to increase their chances of being promoted.	1	2	3	4	5
C3.2	Employees can rotate jobs to develop their skills.	1	2	3	4	5
C3.3	Several professional development activities (e.g., coaching, training) are offered to employees to improve their skills and knowledge.	1	2	3	4	5
C3.4	Proficiency courses such as specialised technical courses and professional certification are encouraged by management.	1	2	3	4	5
C3.5	I am able to apply newly learned skills in my work.	1	2	3	4	5
C3.6	Managers encourage employees to apply newly learned abilities and skills in the context of their daily work.	1	2	3	4	5
C4: FAIR REWARDS PRACTICES						
C4.1	I estimate my salary is fair in comparison to others in the organisation doing similar work.	1	2	3	4	5
C4.2	My salary is fair in comparison with what is offered for a similar job elsewhere.	1	2	3	4	5
C4.3	My compensation level adequately reflects my level of responsibility in the organisation.	1	2	3	4	5
C4.4	The pay increases and/or bonuses I received in the last 2 years adequately reflected my performance.	1	2	3	4	5
C5: INFORMATION-SHARING PRACTICES						
C5.1	Employees are regularly informed of future corporate projects (e.g., major investments, acquisitions, new technologies).	1	2	3	4	5
C5.2	Employees are regularly informed of financial results.	1	2	3	4	5
C5.3	Employees are regularly informed of their work unit's performance.	1	2	3	4	5
C5.4	Employees are regularly informed of technological changes.	1	2	3	4	5
C5.5	Managers regularly inform employees of the level of customer satisfaction for products or services offered.	1	2	3	4	5
C5.6	Employees' suggestions concerning ways to improve the work unit's effectiveness are seriously taken into account.	1	2	3	4	5
C5.7	Employees are regularly informed of the criteria that will be included in their performance evaluation.	1	2	3	4	5
C5.8	Employees' suggestions are followed up.	1	2	3	4	5
C5.9	Employees are regularly informed of new products and/or services.	1	2	3	4	5
C6: EMPLOYEE WELLNESS PRACTICES						
C6.1	My company's leadership supports the promotion of health within my workplace.	1	2	3	4	5
C6.2	My company offers employees health education classes, workshops, lectures and special events on a regular basis.	1	2	3	4	5
C6.3	My company offers health screening services (e.g. blood pressure, cholesterol, blood sugar tests).	1	2	3	4	5
C6.4	My company participates in an employee assistance programme.	1	2	3	4	5
C6.5	My company offers nutrition education and weight management programmes to employees.	1	2	3	4	5

C6.6	There is a designated person, group or committee within my company who is responsible for employee health promotion.	1	2	3	4	5
C6.7	My company has a budget for health promotion and wellness.	1	2	3	4	5

SECTION D: PSYCHOLOGICAL CAPITAL QUESTIONNAIRE (PCQ-24)

Instructions: Below are statements that describe how you may think about yourself right now . Use the following scale to indicate your level of agreement or disagreement with each statement.		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
D1.1	I feel confident analysing a long-term problem to find a solution.	1	2	3	4	5
D1.2	I feel confident in representing my work area in meetings with management.	1	2	3	4	5
D1.3	I feel confident contributing to discussions about the organisation's strategy.	1	2	3	4	5
D1.4	I feel confident helping to set targets/goals in my work area.	1	2	3	4	5
D1.5	I feel confident contacting people outside the organisation (e.g., suppliers, customers) to discuss problems.	1	2	3	4	5
D1.6	I feel confident presenting information to a group of colleagues.	1	2	3	4	5
D1.7	If I should find myself in a jam at work, I could think of many ways to get out of it.	1	2	3	4	5
D1.8	At the present time, I am energetically pursuing my work goals.	1	2	3	4	5
D1.9	I believe there are lots of ways around any problem.	1	2	3	4	5
D1.10	Right now I see myself as being pretty successful at work.	1	2	3	4	5
D1.11	I can think of many ways to reach my current work goals.	1	2	3	4	5
D1.12	At this time, I am meeting the work goals that I have set for myself.	1	2	3	4	5
D1.13	When I have a setback at work, I have trouble recovering from it, moving on.	1	2	3	4	5
D1.14	I usually manage difficulties one way or another at work.	1	2	3	4	5
D1.15	I can be "on my own," so to speak, at work if I have to.	1	2	3	4	5
D1.16	I usually take stressful things at work in stride.	1	2	3	4	5
D1.17	I can get through difficult times at work because I've experienced difficulty before.	1	2	3	4	5
D1.18	I feel I can handle many things at a time at this job.	1	2	3	4	5
D1.19	When things are uncertain for me at work, I usually expect the best.	1	2	3	4	5
D1.20	If something can go wrong for me work-wise, it will.	1	2	3	4	5
D1.21	I always look on the bright side of things regarding my job.	1	2	3	4	5
D1.22	I'm optimistic about what will happen to me in the future as it pertains to work.	1	2	3	4	5
D1.23	In this job, things never work out the way I want them to.	1	2	3	4	5
D1.24	I approach this job as if "every cloud has a silver lining."	1	2	3	4	5

ANNEXURE B: QUESTIONNAIRE COVER LETTER



GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Enquiries: Mr. A. Tiro
Directorate: District Health Services
(West Rand District Council Area)

Tel: +27 (0)11 953 4515
Fax: +27 (0)11 953 4519
Ref. WRDCA03/02/2016

To All Managers/ Staff Members.

Re: Current Staff Research Project

You are hereby invited to participate in a staff research study, taking place from 9 – 24 February 2017.

We humbly request that you complete the attached questionnaire, in order to gather data for the study. Your participation in this study is voluntary and you have the right to withdraw from participation at any time. Your assistance will be greatly appreciated and be valuable to this research.

Should you choose to participate in this project, please answer all questions as honestly as possible. Please do not write any identifying/personal information on the questionnaire (i.e. name, surname, employee number, job title, contact information, etc.). All data obtained will be treated in a strictly confidential manner and will only be used for the purposes of the research.

This study has been reviewed and approved by the Nelson Mandela Metropolitan University Ethics Committee (ethics number H-15-BES-ACC-021). The questionnaire will take approximately 10 minutes to complete.

Completed questionnaires must be submitted to the Human Resources Department by no later than **Friday, 24 February 2017**.

Thank you for taking the time to assist us with this research project. Any queries regarding the survey can be directed to the Human Resources Department.

With thanks,

Mr. A.M Tiro
HR Manager
West Rand Health District



Research – Antonie Theron

ANNEXURE C: PERMISSION LETTER

**Chairperson: Faculty RTI Committee
Faculty of Business and Economic Sciences
Nelson Mandela Metropolitan University
South Campus**

Dear Members of the Faculty RTI Committee


PERMISSION TO CONDUCT RESEARCH STUDY: MR ANTHONIE THERON

On behalf of the West Rand District Department of Health, I am writing to formally indicate our awareness of the research study proposed by Mr Anthonie Theron, a student at the Nelson Mandela Metropolitan University (NMMU). We are aware that Anthonie intends to conduct his research study by administering a written survey to our employees.

As Manager of Human Resources I am granting Anthonie permission to conduct his research at our organisation.

If you have any questions or concerns, please feel free to contact my office.

Yours sincerely,



**Mr. A. M. Tiro
HR Manager:
West Rand District**



ANNEXURE D: ETHICS APPROVAL LETTER



Ref: H-15-BES-ACC-021 [Approved]

Chairperson: Faculty RTI Committee
Faculty of Business and Economics Sciences
Tel. +27 (0)41 504 2906

31 July 2015

Dr A Werner
Human Resources
NMMU
Second Avenue Campus

Dear Dr Werner

PROJECT PROPOSAL: AN HRM MODEL FOR ENHANCING PSYCHOLOGICAL CAPITAL IN SOUTH AFRICAN ORGANISATIONS DURING A PSYCHOLOGICAL RECESSION (DOCTORS)

PRP: Dr A Werner
PI: Mr A Theron

Your above-entitled application for ethics approval served at Fac RTI.

We take pleasure in informing you that the application was approved by the Committee. However, please note that the approval is on condition that permission to conduct the study is also obtained from the other relevant individuals, parties, organisations and/or role players to which the study pertains.

The ethics clearance reference number is **H-15-BES-ACC-021**, and is valid for three years. Please inform the Faculty RTI Committee, via the faculty representative, if any changes (particularly in the methodology) occur during this time.

Please inform your co-investigators of the outcome.

Yours sincerely

Prof C Rootman
Faculty of Business and Economic Sciences

ANNEXURE E: TURNITIN REPORT

Anthonie Theron - PhD Thesis Electronic Copy

ORIGINALITY REPORT

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SIMILARITY INDEX

% 16
INTERNET SOURCES

% 8
PUBLICATIONS

%
STUDENT PAPERS

PRIMARY SOURCES

1	dspace.nwu.ac.za Internet Source	%2
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