

**CORE SELF-EVALUATIONS AS A MODERATOR FOR THE EFFECTS OF
ROLE OVERLOAD AND POWERLESSNESS ON ILL-HEALTH**

Margaretha Elizabeth Bonnet, Hons. B.A. (Psychology)

Mini-dissertation submitted in partial fulfilment of the requirements for the degree
Magister Artium in Industrial Psychology at the North-West University,
Potchefstroom Campus

Supervisor: Dr J Pienaar

Potchefstroom

2007

FOR THE READER'S ATTENTION

The reader is reminded of the following:

- The references as well as the style as prescribed by the *Publication Manual (5th edition)* of the American Psychological Association (APA) were followed in this mini-dissertation. This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University, Potchefstroom Campus to use APA style in all scientific documents as from January 1999.
- The mini-dissertation is submitted in the form of a research article. The editorial style specified by the *South African Journal of Industrial Psychology* (which agrees largely with the APA style) is used, but the APA guidelines were followed in constructing tables.

ACKNOWLEDGEMENTS

I would like to express my gratitude to the following:

- My Heavenly Father, for the opportunity, health and insight He gave me to complete this study.
- Dr Jaco Pienaar, for his continued support, motivation, words of encouragement, guidance and patience.
- Dr Jaco Pienaar, for the statistical analysis of the empirical data.
- Mrs Vanessa van Aardt for the language editing.
- Mrs. Alida Blom for the data capturing.
- The management and employees of the particular division for their time and consideration in completing the measuring instrument.
- Mr. Pine Pienaar for his support of the study and allowing access to his department.
- My husband, Wessel, for his love, patience and support during my studies.
- My children, Wessel and Alida for their support and understanding for the time I took from them.
- My parents, Mr. F. H. van der Westhuizen and Mrs. A. Blom for their encouragement, love and support.
- My brother, Prof. F. H. van der Westhuizen, and his family for their support and giving me a place to stay when I had to attend classes in Potchefstroom.
- My friend, Karen Morgan, for her support and giving me a place to stay when I had to attend classes in Vanderbijlpark.
- I wish to thank the rest of my family and friends for their encouragement and patience.

TABLE OF CONTENTS

List of Tables	vi
Summary	vii
Opsomming	ix

CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT

1.1	Problem Statement	1
1.1.1	Overview of the problem	1
1.1.2	Literature review	3
1.2	Research Objectives	8
1.2.1	General Objective	8
1.2.2	Specific Objectives	8
1.3	Paradigm Perspective of the research	9
1.3.1	Intellectual Climate	9
1.3.2	Discipline	10
1.3.3	Meta-theoretical assumptions	10
1.3.3.1	Literature review	10
1.3.3.2	Empirical study	12
1.3.4	Market of intellectual resources	12
1.3.4.1	Theoretical beliefs	13
1.3.4.2	Methodological beliefs	15
1.4	Research Method	16
1.4.1	Phase 1: Literature review	16
1.4.2	Phase 2: Empirical study	16
1.4.2.1	Research design	16
1.4.2.2	Participants	16
1.4.2.3	Measuring Battery	18
1.4.2.4	Statistical Analysis	20
1.5	Chapter Division	21

CHAPTER 3: CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

3.1	Conclusion	61
3.1.1	Conclusion from the literature	61
3.1.2	Conclusions from the empirical study	63
3.2	Limitations	65
3.3	Recommendations	66
3.3.1	Recommendations to the organisation	66
3.3.2	Recommendations for future research	67

LIST OF TABLES

Table 1	38
Characteristics of the Participants	
Table 2	42
Descriptive Statistics and Chronbach Alpha Coefficients of the Measuring Instruments	
Table 3	43
Correlation Coefficients between scales	
Table 4	45
Multiple Regression Analysis with Depression as Dependent Variable	
Table 5	47
Multiple Regression Analysis with General Health as Dependent Variable	
Table 6	49
Multiple Regression Analysis with Medication Use as Dependent Variable	

LIST OF FIGURES

Figure 1	15
Model depicting the current study	
Figure 2	36
Model depicting the current study	

SUMMARY

Title: Core self-evaluations as a moderator for the effects of role overload and powerlessness on ill-health.

Key words: Self-esteem, self-efficacy, locus of control, neuroticism, role conflict, role overload, powerlessness, organisational climate, salutogenesis, ill-health, medication, depression.

Employees in the Occupational Risk Division (ORD) of a large petrochemical company experience many difficult situations on a regular basis. This division of the company comprises the emergency services, the security and the occupational health divisions of the company. Even though every precaution is taken to ensure the safety of employees in the company, accidents and incidents do happen. The employees of the ORD are confronted with gruesome accidents, dangerous accident scenes where they have to enter when everyone else is evacuated, and security breaches where they may have to enter and resolve serious conflict situations. The possibility that their work climate may contribute to their mental health status is suggested. It is suspected that the stress of the job affects the mental health of the employees of the ORD, and ways need to be found to reduce these effects.

The objective of this research was to determine the relationship between core self-evaluations, role overload, powerlessness and health indicators of employees in the ORD of a large petro-chemical company and to determine whether core self-evaluations act as a moderator in the relationship between role overload and powerlessness on the one hand and health indicators on the other hand.

A cross-sectional design was used. The sample consisted of 299 employees from the Occupational Risk Division of the organization. Age, gender and level of education were included as control variables. A comprehensive survey containing the measuring instruments was administered. Descriptive statistics and inferential statistics were used to analyse the data.

Results obtained indicated that some of the scales were not reliable. Powerlessness was dropped from the analysis and qualitative and quantitative role overload were collapsed into a total overload measure. The results showed that a negative relationship exists between role overload and core self-evaluations. A positive relationship exists between role overload and neuroticism, poor health and depression. Self-esteem, self-efficacy and locus of control are negatively related to neuroticism and health, and neuroticism is positively related to poor health.

Depression was predicted by experiences of overload, levels of self-efficacy, locus of control and negative affect (Neuroticism). General health was predicted by experiences of overload, locus of control, neuroticism and the interaction between overload and self-esteem. None of the scales predict medication use to a significant degree.

Results further indicated that only self-esteem acts as a moderator in the relationship between role overload and general health, but none of the variables of core self-evaluations act as a moderator between role overload and depression or between role overload and the use of medication.

By way of conclusion, recommendations for future research were made.

OPSOMMING

Titel: Kern self-evaluerings as 'n moderator vir die effekte van rol oorlading en magteloosheid op swak gesondheid.

Sleutelwoorde: Selfagting, self-doelmatigheid, lokus van beheer, neurose, rol, rol konflik, rol oorlading, magteloosheid, organisasie klimaat, salutogenese, swak gesondheid, medikasie, depressie.

Werknemers van die Beroepsrisiko Divisie (BD) van 'n groot petrochemiese maatskappy ervaar daaglik moeilike situasies. Hierdie afdeling van die maatskappy bestaan uit die nooddienste, sekuriteit en beroepsgesondheid afdelings. Ten spyte daarvan dat alle redelike voorsorg getref word om die werknemers van die maatskappy se veiligheid te verseker, gebeur daar tog ongelukke en insidente. Die werknemers van die BD word dan daaglik gekonfronteer met aaklige ongelukke, gevaarlike ongelukstonele waar hulle die toneel moet betree terwyl ander die toneel ontruim, asook sekuriteit insidente waar hul soms ernstige konflik situasies moet oplos. Die moontlikheid dat hul werk klimaat dalk 'n rol kan speel in hul geestesgesondheid, is geopper. Daar word vermoed dat die spanning wat die werk teweeg bring die geestesgesondheid van die werknemers van die BD kan beïnvloed en dat maniere gevind moet word om hierdie effek teen te werk.

Die doelstelling van hierdie navorsing was om die verwantskap tussen kern self-evaluerings, rol oorlading, magteloosheid en aanduiders van gesondheid onder werknemers van die BD van 'n groot petrochemiese maatskappy te bepaal. 'n Verdere doelstelling van die studie was om te bepaal of kern self-evaluerings dien as 'n modererende faktor in die verwantskap tussen rol oorlading en magteloosheid aan die een kant en aanduiders van gesondheid aan die ander kant.

'n Eenmalige dwarsnee opname-ontwerp is gebruik. Die steekproef het bestaan uit 299 werknemers van die Beroepsrisiko Divisie. Ouderdom, geslag en opvoedingsvlak was ingesluit as kontroleer veranderlikes. Een omvattende meetinstrument wat al die meetinstrumente insluit, is gebruik. Beskrywende en afleidende statistiek is gebruik om die data te analiseer.

Uitslae het aangedui dat van die skale nie betroubaar was nie. Magteloosheid is verwyder uit die analise. Kwalitatiewe en kwantitatiewe rol oorlading was inmeekaargesak in een faktor naamlik, totale rol oorlading. Die uitslae het aangedui dat daar 'n negatiewe verband bestaan tussen rol oorlading en kern self-evaluerings. 'n Positiewe verband bestaan tussen rol oorlading en neurose, swak gesondheid en depressie. 'n Negatiewe verband is gevind tussen selfagting, self-doelmatigheid en lokus van beheer aan die een kant en neurose en gesondheid aan die ander kant. 'n Positiewe verband is gevind tussen neurose en swak gesondheid.

Depressie was voorspel deur ervarings van oorlading, vlakke van self-doelmatigheid, lokus van beheer en negatiewe affek (Neurose). Algemene gesondheid was voorspel deur ervarings van oorlading, lokus van beheer, neurose en die interaksie tussen oorlading en selfagting. Nie een van die skale speel 'n statisties beduidende rol in die voorspelling van die gebruik van medikasie nie.

Resultate het verder aangedui dat slegs selfagting dien as moderator in die verhouding tussen rol oorlading en algemene gesondheid, en dat geen van die ander veranderlikes van kern self-evaluerings as moderator optree tussen oorlading en depressie of tussen oorlading en gebruik van medikasie nie.

Aanbevelings vir toekomstige studies was by wyse van konklusie gemaak.

CHAPTER 1

INTRODUCTION

This dissertation deals with core self-evaluations as a moderator for the effects of role overload and powerlessness on ill-health. In this chapter the specific problem will be identified and explored. The literature will be consulted to find out to what extent the problem has been researched before. After stating the problem, research objectives will be set and the paradigm perspective of the study will be stated. The research method that will be used to explore the problem will be explained and a chapter division for the dissertation will be indicated.

1.1 PROBLEM STATEMENT

1.1.1 Overview of the problem

During 2007 a large petrochemical company experienced two disturbing incidents involving employees of the company. The incidents occurred within a day of each other. In one incident an employee killed both himself and his wife at work. In another incident an employee shot his wife and committed suicide at home. Both individuals involved were emergency personnel of the company and management expressed serious concern about these incidents.

The Occupational Risk Division comprises the emergency services, the security division and the occupational health division of the company. These employees are confronted with difficult situations daily. The company has also recently experienced accidents that have affected many employees and their families. Employees, including those of the Occupational Risk Division, are provided with opportunities to be debriefed and services are available to help them cope with difficult situations. Unfortunately, for unknown reasons, these services are not always used by all the employees.

