

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**OCCUPATIONAL STRESS AND STRAINS IN
REHABILITATION SERVICE PROVISION:
SOME MODERATING AFFECTS OF
A SENSE OF COHERENCE**

**A thesis presented in partial fulfilment of
the requirements for the degree of
Master of Arts in Psychology
at Massey University**

**Paul H Schreuder
1996**

ABSTRACT

The sense of coherence was investigated as a potential moderator between psychological climate (PC) stressors and job satisfaction, intent to quit the organisation/profession and psychological well-being. Respondents were a heterogeneous group of rehabilitation providers (n=89) drawn from a list provided by the New Zealand Rehabilitation Society, and from a list of individuals who had completed a post graduate diploma in rehabilitation at Massey university. The relationships between demographic variables and other variables were examined using Pearson r's correlations and t-tests. Significant demographic variables that were entered as control variables in a series of hierarchical multiple regressions. Hierarchical multiple regressions were also performed to analyse potential moderating effects. The results of the study, found that the PC variables role ambiguity, management awareness, job variety and challenge, and leader trust and support significantly predicted job satisfaction. Role ambiguity was also found to be significant predictor of positive affect and general happiness. The SOC subscales of meaningfulness, comprehensibility and manageability were found to be significant predictors of job satisfaction. Meaningfulness was also found to be a significant predictor of intent to quit the profession and organisation, and manageability and meaningfulness significantly predicted positive affect and negative affect. The interaction analyses found that meaningfulness moderated the effects of role ambiguity on job satisfaction, and manageability moderated the effects of role ambiguity on general happiness. Meaningfulness was found to be the pivotal aspect of the SOC construct. The research limitations and implications were discussed along with recommendations for future research.

ACKNOWLEDGEMENTS

I am very grateful to my supervisor Dr Ross Flett, not only for his guidance, and constructive suggestions, but also for his sense of humour and his generosity of time given.

Thank you also to Dr Fiona Alpass for sharing her resources, and Bert Biggs for his assistance.

I also thank Dr Tudor Caradoc-Davies, president of the NZ Rehabilitation Society.

CONTENTS

Abstract	ii
Acknowledgements	iii
Contents	iv
List of tables	vi
List of figures	vii
CHAPTER 1 OVERVIEW	
1.1 The problem of stress	1
1.2 Organisation of the introduction	3
1.3 Chapter summary	4
CHAPTER 2 THE STRESSORS	
2.1 Chapter overview	6
2.2 General stress	6
2.3 Occupational stress	7
2.4 Coping	8
2.5 Psychological climate overview	10
2.6 Psychological climate instruments	11
2.7 Comparison between present study and Kelley & Satcher model	12
2.8 Psychological climate research overview	14
2.9 Chapter summary	16
CHAPTER 3 THE STRAINS	
3.1 Chapter overview	18
3.2 Job satisfaction overview	18
3.2.1 Measures of job satisfaction	20
3.2.2 Demographics and job satisfaction	21
3.2.3 Correlational studies	21
3.3 Psychological well-being	24
3.4 Intention to quit	25
3.5 Chapter summary	27
CHAPTER 4 SENSE OF COHERENCE	
4.1 Personality as a moderator	29
4.2 Overview of Salutogenesis	30
4.3 Meaningfulness, comprehensibility and manageability	33
4.4 Generalised resistance resources/deficits	37
4.5 Chapter summary	41
CHAPTER 5 MODEL AND RESEARCH GOALS	
	42

CHAPTER 6 METHOD

6.1 Method	45
6.2 Sample	45
6.3 Procedure	45
6.4 Measures	46
6.5 Analysis	49

CHAPTER 7 RESULTS

7.1 Chapter overview	50
7.2 Demographic data	50
7.3 Multiple regression analysis of employment status and PC on job satisfaction	52
7.4 Multiple regression of employment status and SOC on job satisfaction	53
7.5 Interaction analysis of SOC and role ambiguity on job satisfaction	54
7.6 Multiple regression analysis of family income and SOC on intent to quit the profession	55
7.7 Multiple regression analysis of total years in profession and PC on intent to quit organisation	56
7.8 Multiple regression analysis of total years in profession and SOC on intent to quit profession	57
7.9 Multiple regression analysis of years in profession and SOC on intent to quit organisation	58
7.10 Multiple regression analysis of SOC on positive affect	59
7.11 Multiple regression analysis of PC on positive affect	60
7.12 Multiple regression analysis of PC on negative affect	61
7.13 Multiple regression analysis of SOC on negative affect	62
7.14 Multiple regression analysis of SOC on happiness	63
7.15 Multiple regression analysis of PC on happiness	64
7.16 Interaction analysis of PC and SOC on happiness	65
7.17 Comparison of happiness between present sample and general population	67
7.18 SOC score comparison between present study and other samples	67
7.19 Analysis of combinations of SOC dichotomised variables	68

CHAPTER 8 DISCUSSION

8.1 Chapter overview	70
8.2 Limitations of present study	70
8.3 Discussions of findings to research questions	71
8.4 Implications	80
8.5 Conclusions and suggestions for further research	81

REFERENCES	85
------------------	----

APPENDIX 1	99
------------------	----

APPENDIX 2	100
------------------	-----

LIST OF TABLES

Table 2.1. PC composite variables by four factor domains	12
Table 2.2. Similarities between present study and Kelley and Satcher model ..	13
Table 4.1. The dynamic interrelatedness of the SOC components	34
Table 7.1. Alphas, means and S/D's of all variables	51
Table 7.2. Multiple regression of employment status and PC on job satisfaction	52
Table 7.3. Multiple regression of employment status and SOC on job satisfaction	53
Table 7.4. Multiple regression of family income and SOC on intent to quit the profession	56
Table 7.5. Multiple regression of family income and PC on intent to quit profession	57
Table 7.6. Multiple regression of years in profession and PC on intent to quit organisation	58
Table 7.7. Multiple regression of total years in profession and SOC on intent to quit organisation	59
Table 7.8. Multiple regression of SOC on positive affect	60
Table 7.9. Multiple regression of PC on positive affect	61
Table 7.10. Multiple regression of PC on negative affect	62
Table 7.11. Multiple regression of SOC on negative affect	63
Table 7.12. Multiple regression of SOC on happiness	64
Table 7.13. Multiple regression of PC on happiness	65
Table 7.14. Selection of published SOC-13 studies	68
Table 7.15. Combination of SOC dichotomised components	69

LIST OF FIGURES

Figure 1.1. Stressor-strain relationship.....	5
Figure 5.1. Diagramatic representation of model used in present study.....	42
Figure 7.1. Schematic representation of meaningfulness X role ambiguity interaction in predicting job satisfaction	55
Figure 7.2. Schematic representation of manageability X role ambiguity interaction in predicting happiness	66

INTRODUCTION

CHAPTER 1. OVERVIEW

1.1. The problem of stress.

The costs of stress related outcomes is difficult to calculate or quantify, but estimates given by Matteson and Ivancevich in 1987 (as cited in Flett, Biggs, & Alpass, 1995) put the financial losses to industry at up to \$60 billion per annum. A more recent statistic given by Hanson (1989), puts the figure at approaching \$200 billion in North America alone. According to Hanson up to 80% of all illnesses have been linked to stress.

Due to high staff turnover, absenteeism, and decreased productivity, stress related costs are also high in the rehabilitation profession (Riggan, Hansen, & Crimando, 1987). Legislative changes such as the Americans with Disabilities Act of 1990, and the 1992 Rehabilitation Act Amendments have raised the profile as well as workload of the 'caring professions' (Flett et al., 1995). The restructuring of the New Zealand economy along with the 'user-pay' philosophy adopted en masse has also contributed to the increased responsibility and workload of the rehabilitation worker. Such an uncertain and unpredictable work environment for the rehabilitation provider has led Flett et al. (1995) to argue for a higher priority being given to research on stress related issues.

Given this argument, the present thesis focuses on some of the stressors and strains experienced by a heterogeneous group of New Zealand rehabilitation providers. The stressors of interest to the present study are various aspects of psychological climate (PC). The strains focused on are; job satisfaction, general well-being, and intent to quit the organisation and/or rehabilitation profession. The possible inter-

action effect of the individual's 'sense of coherence', a personality construct theorised by Antonovsky (1979), is also of interest to the present study.

While there appears to be an abundance of continual research into the causes and negative affects of job related stress, as well as studies focused on coping strategies, research which targets issues of stress in the rehabilitation service 'industry' is somewhat scarce. Wallis (1987) noted the lack of research on 'caring professions' in general. An analysis of publications in the *Journal of Occupational Psychology* undertaken by Wallis revealed that of 165 papers analysed, only 11 papers described studies of people employed in the 'caring professions'. Because human service professionals are often drawn towards work that gives them direct contact with needy individuals, they are frequently ill prepared for the wide range of emotional demands of such work (Leiter 1991). The reality of the workplace, for many in the 'caring' professions contributes to the high rate of work strain. The end-user of the human services are often individuals undergoing severe distress, and therefore demand much of others (Maslach, 1982, as cited in Leiter, 1991). Alternatively, Gross (1994), argued that human service professionals who engage in counselling emotionally distressed clients risk developing negative emotional reactions themselves.

Although some theorists have touted empathy as critical for therapeutic success (Day & Chambers, 1991), others (Lief & Fox, 1963; Pines, Aronson, & Kafry, 1981, cited in Day & Chambers, 1991), argue that 'detached concern' for one's clients is the key to buffer the deleterious effects of the counselling relationship. This juxtaposition of being empathic and detached, is a salient reminder of the ambiguous environment that the rehabilitation worker is in. Glisson and Durick (1988) studied human service workers from 22 organisations in the 'caring' industry, and paint a gloomy picture of their sample in general. These commentators describe the type of human services sampled as beset by low morale, high turnover and burnout rates. Swanson (1987), described the rehabilitation worker's environment as one filled

with ambiguity tension and closure tension “... where the practitioner is continually faced with selecting the best alternative for a client from a vast array of possibilities (ambiguity) and an ever present array of half finished tasks (lack of closure)” (p. 23). The scenario of a distressed ‘carer’ coming to the aid of a distressed client, cannot contribute to an ideal outcome.

1.2. Organisation of the introduction

To set the scene chapter 2 will provide an overview on some of the definitions of stress, as well as briefly focusing on stress coping. Whilst coping is not a direct focus of the present study, the sense of coherence construct is essentially an instrument that measures how individuals manage stress and stay well (Antonovsky, 1987) . The concept of positive as well as negative stress will be highlighted, along with a brief discussion on the cognitive aspect of stress. The generally stressful environment of the rehabilitation provider will also be briefly examined.

Chapter 2 will also provide a discussion on psychological climate (PC), a construct that represents the individual’s perception of the work environment. The present research considers (PC) variables such as leader trust and support, leader goal facilitation, leader interaction facilitation, management concern and awareness, workgroup cooperation , workgroup friendliness and support as well as role conflict, role ambiguity, job challenge and variety as predictor variables. These PC variables were selected to provide a short-form questionnaire that nevertheless encompass the four components consistently utilised in studies of this kind (James, James, & Ash, 1990). These components are: Role stress and lack of harmony; Job challenge and autonomy; Leadership facilitation and support; and Workgroup cooperation, friendliness and warmth.

Several researchers focused on the ‘caring professions’ have highlighted the impact of PC variables on outcomes such as job satisfaction, turnover, the quality of worklife, and productivity. (Barrett, Crimando, & Riggarr, 1993; Glisson & Durick, 1988. Kelley

& Satcher, 1992). According to James and James, (1989), and Florin, Giamartino, Kenny, and Wandersman (1990), the individual's perceptions of the organisation have been linked to job satisfaction, and turnover (Jackofsky & Slocum, 1988). Poulton (1988) asserts that an understanding of the 'personal glue' that holds the organisation together is essential. As Biggs, Flett, Voges and Alpass (1995) point out, if rehabilitation work involves teamwork, then organisational variables (and psychological climate variables) must become a focus of research.

The study also considers job satisfaction, intention to quit, and wellbeing or 'happiness' as 'outcome' variables. (See chapter 3). Some commentators have noted that human service organisations report lower levels of job satisfaction than other organisations (Glisson & Durick, 1988). High rates of staff turnover in human services have also been reported (Hanson, & Crimando, 1987). The deleterious effects of 'unhappy' rehabilitation practitioners has been highlighted by such commentators as Glisson and Durick (1988). Chapter 3 covers these issues in more detail.

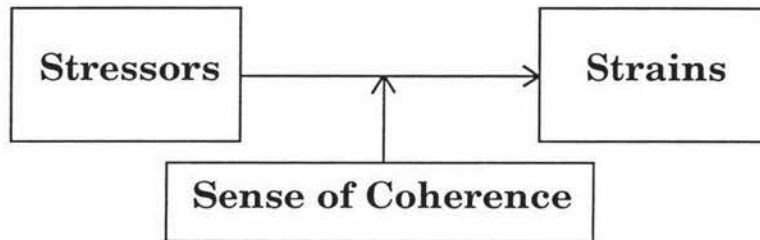
Chapter 4 provides a review of Antonovsky's , (1979) 'sense of coherence' (SOC). SOC is a personality characteristic, which for the purposes of the present research is viewed as a potential moderating variable. The present study intends to add to the rather limited research on the SOC, and therefore much of the findings will be considered exploratory in nature. Various studies have looked at the way personality variables or individual differences have interacted with stressors and strains encountered in the rehabilitation environment (e.g. Clanton, Rude & Taylor, 1992; Day & Chambers, 1991; Gross, 1994.).

1.3. Chapter Summary

Chapter one, has provided a preview of the subsequent chapters in the introduction, and discussed some of the general costs of stress to the 'caring industry'. The PC variables that are considered to be the stressors of the present study were briefly

looked at, as were the strain variables and the SOC which has been cast as the personality variable in the equation. The relation between these concepts is presented diagrammatically at figure 1.1.

Figure 1.1: Model used in present study



In general the rehabilitation literature paints a gloomy picture of the working environment in which the rehabilitation provider exists.

The following chapter will give a brief outline of some of the definitions given to the term ‘stress’, as well as examining the term ‘occupational stress’. Some models that fit the purpose of the present study will also be considered. A brief outline on coping issues will also be given. The rest of the chapter will focus on the PC variables, which are the stressors employed in the present study, and the part they play in the stressor-strain relationship. More specifically these are the following PC variables as defined by Jones and James (1979) and James and Sells (1981, as cited in Alpass, 1994); Role ambiguity, role conflict, management concern and awareness, job challenge and variety, leader trust and support, leader goal facilitation, leader interaction facilitation, workgroup cooperation, and workgroup friendliness and warmth. (See Appendix 1.)