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Shiftwork in Air Traffic Services: coping strategies and well-being

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

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ABSTRACT

It is becoming widely recognised that shiftwork has significant implications for the health, safety and quality of life of shiftworkers. To date, little research has been carried out on how individuals cope with the problems caused by shiftwork and how effective coping strategies maintain their health and well-being. It has been proposed, by Monk (1994), that there are a number of aspects of a shiftworker's life which are important in determining the ability of an individual to cope with shiftwork. These factors are an individual's circadian rhythms, sleep patterns, and social and domestic situation. Further literature also suggests that workplace factors and coping style are an important part of tolerating shiftwork. The primary aim of the present study was to determine which factors are important in predicting the physical and mental wellbeing of Air Traffic Services staff working on shifts. It was hypothesised that individuals who are evening types, have few social, domestic, sleep, and work place difficulties will be physically and mentally healthy. In addition, it was hypothesised that the use of engagement strategies in dealing with shiftwork related problems will relate to better physical and mental health. To test the hypotheses, 183 Air Traffic Services staff from Melbourne centre, Australia were surveyed by questionnaire. The results of the regressions showed that physical health was predicted by variables from each of the five areas considered; circadian typology, the social and domestic situation, work place factors, sleep patterns and coping style. Mental well-being was best predicted by a single domestic variable, which is the extent to which shiftwork caused domestic problems and the two coping variables of engagement and disengagement. The results support the suggestion that in order for an individual to be able to tolerate shiftwork they must have strategies in place to help them deal with the effect of shiftwork variables on a range of factors in their lives. An additional aim of the present study was to determine the reliability of a questionnaire for use with Air Traffic Services staff. This was due to a lack of suitable questionnaires for use in this occupational context. Overall the items in the questionnaire were found to have acceptable reliability, although the collection of sleep data by subjective reporting is not recommended.

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TABLE OF CONTENTS

Abstract	ii
Acknowledgments	iii
List of Tables	v
List of Figures	vii

1. Introduction	1
1.1 Well-being of Shiftworkers	2
1.2 Well-being of Air Traffic Controllers	
1.3 The Conceptual Model	
1.4 Research Goals	
1.5 Hypotheses	

2. Method	44
2.1 Overview	
2.2 Participants	45
2.3 Measures	
2.4 Procedure	

3. Results	54
3.1 Analyses	54
3.2 Data Screening	
3.3 Questionnaire Reliability	
3.4 Sample Description	
3.5 Descriptive Statistics	
3.6 Regression Analyses	
3.7 Summary of the Results of the Regression Analyses	

4. Discussion	97
4.1 Reliability Study	97
4.2 Overview	99
4.3 Significant Findings	
4.4 Limitations of the Present Study and Suggestions for Future Research	
4.5 Practical Implications	
-	
References	115
References	115
Appendix A	129
Appendix A	129 140
Appendix A	129 140
Appendix A	129 140 146

LIST OF TABLES

Table 1:	Factors Associated with Work Systems and Work that are likely to cause Shiftwork Coping Problems
Table 2:	Recommendations made by the Committee on the Regulation of Air Traffic Controllers Hours, United Kingdom (1990)
Table 3:	Demographic Data of Australian Air Traffic Service Staff57
Table 4:	Summary of Air Service Data
Table 5:	Means and Standard Deviations for Continuous Variables61
Table 6:	Inter-Correlations between Continuous Independent Variables65
Table 7:	Frequency of Self Rated Health Ratings
Table 8:	Standard Multiple Regression of Workplace Factors, Coping Factors, Social and Domestic Factors, Circadian Factors, and Sleep Factors on Physical Well-being, Showing Standardised Regression Coefficients, R, R^2 and Adjusted R^2 for all Participants ($N = 182$)
Table 9:	Standard Multiple Regression of Workplace Factors, Coping Factors, Social and Domestic Factors, Circadian Factors, and Sleep Factors on Mental Well-being, Showing Standardised Regression Coefficients, R, R ² and Adjusted R ² for all Participants ($N = 182$)
Table 10:	Standard Multiple Regression of Workplace Factors, Coping Factors, Social and Domestic Factors, Circadian Factors, and Sleep Factors on Self Rated Health, Showing Standardised Regression Coefficients, R, R^2 and Adjusted R^2 for all Participants ($N = 182$)
Table 11:	Summary of the Significant Variables for Physical Well-being, Mental Well-being, and Self Rated Health in each Multiple Regression Analysis
Table A1:	Demographic Variables for the Reliability Study131
Table A2:	Work Related Variables in the Reliability Study132
Table A3:	Means and Standard Deviations for Continuous Variables in the Reliability Study134
Table A4:	Pearson's Correlation Coefficients for all Variables in the Reliability Study

Table B1:	Frequencies of		U		C				
	Shifts	•••••		•••••	•••••	•••••	•••••	•••••	141
	Frequencies Questionnaire		0						

LIST OF FIGURES

Figure 1:	"Stress and Strain" Model (Colquhoun & Rutenfraz, 1980)3
Figure 2:	Relationship of Circadian Factors, Sleep Factors and Domestic Factors to an Individual's Coping Ability (Monk, 1994)20
Figure 3:	Circadian Rhythm of a Day Worker's Body Temperature (Minors & Waterhouse, 1990)
Figure 4:	Model of Typical Work/Sleep/Off-time Strategies Used by 90% of Workers on the Day, Afternoon/Evening, and Night Shifts (Tepas, Walsh & Armstrong, 1981)
Figure 5:	Number of Years in Air Services and Number of Years in Current Position
Figure 6:	Ratings of Agreement with Satisfaction with Work Tasks, the Job as a Whole, Shift Cycle, and Daily Hours of Work
Figure 7:	Frequency of Use of Engagement and Disengagement Strategies76
Figure 8:	Frequency of Scores for the Extent to which Shiftwork Causes Problems with Social Life and Domestic Life
Figure 9:	Mean Sleep length on Day Shift, Afternoon Shift, and Evening Shift
Figure 10:	Frequency of Circadian Types81
Figure B1:	Number of Months on Current Shift Cycle142
Figure B2:	Frequency of Working Short Change Shifts142
Figure B3:	Frequency of Changing Shifts to Accommodate Other Activities142
Figure B4:	Maximum Number of Days Worked Consecutively in the Last Six Months
Figure B5:	Frequency of Scores for the Effect of Shiftwork on Family Life 143
Figure B6:	Scores for the Effect of Shiftwork on Off-work Activities and Personal Relationships
Figure B7:	Number of Hours Worked per Week by Spouse143
Figure B8:	Sleep Patterns on Day Shift and Night Shift143
Figure B9:	Ratings on Sleep Variables

Figure B10:	Ratings on Fatigue Variables144
Figure B11:	Ratings for Health Symptoms144
Figure B12:	Ratings on General Well-being Variables144
Figure B13:	Ratings of Gastrointestinal Complaints and Dietary Habits145