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Managing occupational stress in a high-risk industry:

Measuring the job demands of correctional officers

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Abstract

Occupational stress is an increasing health problem for the high-risk industries. The occupation of correctional officers has received relatively scant attention, contributing to a recent increase in formal occupational stress claims. This research evaluated the ability of the Job Demand-Control-Support (JD-CS) model to predict strain in 132 Australian correctional officers. A specific measure of job demands predicted the psychological outcome (job satisfaction) to a greater extent than the generic (JD-CS) demands measure. The ability of supervisor support to moderate the consequences of these job demands was also demonstrated and has implications for the training of correctional supervisors. Arguments for including sample-specific measures of job demands are discussed.

Keywords: correctional officers, job demands, job satisfaction, supervisor support, psychological well-being.

## Introduction

### *Correctional officer stress*

The number of formal psychological stress claims submitted by Australian employees has recently increased. These claims now constitute approximately 45% of an Australian organization's compensation costs and insurance premiums. Occupational stress costs Australian organizations approximately AUD\$105.5m (US\$75 million) per annum and represents approximately 6.5% of reported workplace injuries (Miller, 2003; NOHSC, 2003). The recent increases in occupational stress experienced by correctional officers in particular, have been acknowledged (e.g., Dowden & Tellier, 2004). Reasons for this increase include the overcrowding of correctional centers as a result of offenders receiving longer custodial sentences and an increase in the numbers of mentally ill offenders and violent offenders resulting in increased staff assaults (Finn, 1998; Martinez, 1997). Other work characteristics contributing to the experiences of occupational stress for correctional officers include: the militaristic structure of correctional centers/services, the use of shift-based working hours, negative public perceptions of corrections and the double bind caused by incompatible demands between administration and prisoners (Moon & Maxwell, 2004; Morgan, Van Haveren, & Pearson, 2002). Interestingly, the experience of occupational stress is more strongly attributed to the levels of anxiety and depression experienced by correctional workers, as compared to their experiences of critical incidents alone (Gehrke, 2004). This latter point is also reflective of the psychological stress police literature where *organizational* stressors rather than *operational* work encounters (i.e., critical incidents) have demonstrated the strongest relationships with adverse outcomes (Brough, 2004; Hart, Wearing, & Headey, 1993).

The consequences of occupational stress are costly for corrections services and their employees. For example, in South Australia correctional officers submitted the highest number of

formal psychological stress claims per 1000 employees of any occupational group, followed by human service workers, educational sector workers, and police officers (Dollard, Winefield, & Winefield, 2001). Prolonged experiences of occupational stress by correctional officers are associated with impaired family relationships (Finn, 1998) and poor physical health outcomes in comparison with other occupational groups (Cheek & Miller, 1983). Adverse organizational consequences of stress also impact on correctional centre budgets due to staff illness, turnover, required overtime, early retirement, and workers' compensation claims (Childress, Talucci, & Wood, 1999).

### *Gender differences*

Research in high stress occupations (police, teaching, corrections) has identified that while females perform as ably as men in male dominated occupations, they experience stress differently (Brown & Fielding, 1993). For example, female correctional officers report lower levels of burnout and turnover but higher levels of absenteeism compared to male officers (Lambert, Edwards, Camp, & Saylor, 2005). Similarly, Savicki, Cooley, and Gjesvold (2003) demonstrated that whilst female officers perceive more harassment than men this did not translate to differences in levels of burnout or stress. Savicki et al. concluded that female correctional officers have developed a variety of effective coping skills to enable them to manage their working environment.

### *The Job Demands Control Support Model*

Over the past two decades research into occupational stress has been significantly influenced by the Job Demands-Control model (JDC; Karasek, 1979) and its revision as the Job Demands-Control-Support model (JDCS; Johnson & Hall, 1988). These theoretical models describe the relationships between psychosocial work conditions and strain symptoms. The JDC model proposed that the two job characteristics most important for predicting employee strain are

job demands and job control. The JDC model proposed that psychological strain arises not only from the direct effects of job demands and control but also from the *interactive* effects of these two constructs. Based on this model, workers who perceive their job as demanding, yet believe they have some control over their work, would be expected to experience improved personal and job-related outcomes. Whereas employees who consistently experience high levels of job demands but a *low* level of perceived job control are most at risk for developing adverse outcomes such as psychological strain and decreased job performance (e.g., Mansell & Brough, 2005).

The JDCS model includes a third dimension: perceived social support at work, which is considered to moderate the relationship between job demands, job control, and strain (Johnson & Hall, 1988). The JDCS model predicts that psychological strain will be experienced under conditions of high job demands, combined with low levels of both job control and social support. Dollard and Winefield (1998) tested the JDCS in a sample of Australian correctional officers and demonstrated that officers who experienced high job demands also reported high levels of psychological distress, job dissatisfaction, and physical health symptoms. Furthermore, these negative outcomes were exacerbated when high job demands were accompanied by low job control and low levels of perceived social support. Recently, the specific *source* of social support has been recognized as being important. Investigations have distinguished between support received in the workplace (i.e., levels of perceived supervisor support and colleague support) and support received external to work (i.e., family/friends support; Caplan, Cobb, French, Harrison, and Pinneau, 1975). Brough and Pears (2004) for example, demonstrated that support received from supervisors positively predicted levels of job satisfaction in one group of Australian Government workers, whilst social support received from work colleagues was not so strongly related to either job satisfaction or work-related psychological well-being.

The JDC and the JDCS have been researched among a wide variety of occupational groups (for reviews see Mansell & Brough, 2005; van der Doef and Maes, 1999). The models have demonstrated both theoretical and practical insights into the antecedents of occupational stress (i.e., distinguishing between a worker's control over the *timing* and *method* by which they conduct their job tasks: Jackson, Wall, Martin, & Davids, 1993). Support for the interactive effect between the levels of job demand and job control however, has been markedly inconsistent. For example, van der Doef and Maes (1999) found a moderating effect for job control in only one half of the studies which tested this interaction. The inconsistency of evidence for an interactive effect has been attributed to poor construct measurement, low statistical power, and a failure to take account of nonlinear relationships (Mansell & Brough, 2005). Nevertheless the JDC/JDCS remain popular theories for investigations of occupational stress (e.g., De Lange, Taris, Kompier, Houtman, & Bongers, 2003; Holman & Wall, 2002).

A pertinent discussion within the occupational stress literature concerns the relevance of measuring *sample-specific* job demands as well as, or instead of, the global job demands tested by the JDC measures and such like (Jackson, et al. 1993; Mansell & Brough, 2005). This discussion has progressed the most within the police stress literature where measures of specific job stressors experienced by police officers have demonstrated a better ability to account for adverse psychological outcomes, in comparison with more generic job demands measures (Brough, 2004; Hart et al., 1993). The testing of a sample-specific job demands measure within correctional officers has received scant attention, while the dearth of scientific solutions that successfully address this contemporary occupational health hazard is continually acknowledged (Caulfield, Chang, Dollard, & Elshaug, 2004).

The current research has two aims: First to develop a psychometrically robust specific measure of job demands commonly experienced by correctional officers and, second to compare

the predictive validity of this specific measure with the more generic job demands measure (Jackson et al., 1993) in the direct and indirect predictions of two common psychological outcomes (job satisfaction and work-related psychological well-being). It is hypothesized that the specific correctional officers job demands measure will demonstrate a greater predictive validity with each criterion measure, as compared to that of the generic job demands measure.

## Method

### *Research participants and procedure*

A random sample of 361 officers employed at five correctional facilities in one Australian state was selected for participation in the study. The five correctional facilities varied in terms of management and operational styles, security classifications, and types of offenders. The research study was widely publicized in each correctional facility and with the assistance of each center's management personnel a random sample of currently employed correctional officers was derived. The sample identified in each centre was proportional to the center's size and was representative of gender, tenure, and employment levels. A self-report questionnaire was delivered by internal mail to each research participant and completed questionnaires were returned directly to the University. An incentive for participation in the study was offered with respondents encouraged to enter the prize draw for the chance to win free cinema tickets. The completed questionnaires were both anonymous and confidential. A total of 132 completed questionnaires were returned to the researchers, rendering a response rate of 37%.

The respondent sample comprised of 76% ( $n = 101$ ) males and 24% ( $n = 31$ ) females. Respondents ranged in age from 21 to 65, with an average age of 46 years ( $SD = 8.76$ ). Tenure ranged from 2 to 29 years, with a mean tenure of 10 years ( $SD = 5.63$ ). Approximately 85% ( $n = 112$ ) of respondents held the position of correctional officer, 11% ( $n = 14$ ) were correctional

supervisors, and 2% ( $n = 2$ ) held management positions. Approximately 55% ( $n = 59$ ) of respondents had completed tertiary education and had attained a University degree or diploma (3% ( $n = 4$ ) of these respondents held a post-graduate University degree). Forty-seven per cent of respondents ( $n = 62$ ) listed High School qualifications as their highest education attainment. The vast majority of the respondents (90%;  $n = 119$ ) identified themselves as permanent employees (9% ( $n = 12$ ) were casual or temporary employees) and in the week prior to completing the questionnaire 5% ( $n = 6$ ) of the respondents reported working 30 hours or less and 86% ( $n = 114$ ) worked between 36-55 hours ( $M = 38.36$ ;  $SD = 5.67$ ).

### *Measures*

*Correctional Officer Job Demands.* A measure of specific job demands commonly experienced by correctional officers was developed by this research. The measure was developed from individual interviews with correctional officers, discussing their current job demands. The ten most frequently cited items were compiled into a self-report measure. The measure was approved by an independent sample of correctional officers as having a high level of face validity (see Williams (2004) for full measure construction details). Example scale items are: 'Possibility of violence from offenders' and 'Lack of clear guidelines for job performance'. The respondents were asked to indicate how much each item contributes to stress experienced by correctional officers on a 5 point Likert scale (1 = *not at all* to 5 = *a great deal*). High scores represent high levels of job demands. This measure is included in Appendix A.

*Job Demands and Job Control.* Job Demands and Job Control were measured with Jackson et al's (1993) Job Demands and Control Scale (19 items). Jackson et al developed these measures to measure four specific facets of control and demands (i.e., Monitoring Demands, Problem Solving Demands, Timing Control, and Method Control). These measures were originally developed to assess job characteristics in manufacturing occupations, however they



have subsequently demonstrated discriminant validity within a broad range of occupations including public service workers employed within high-stress occupations (Mansell & Brough, 2005; Wall, Jackson, & Mullarkey, 1995). Example scale items are: ‘Do you come across problems in your job you have not met before?’ (Monitoring Demands) and ‘Do you set your own pace of work?’ (Timing Control). Respondents answered on a 5 point Likert scale from 1 = *not at all* to 5 = *a great deal*. High scores indicate high levels of job demands and job control. The current research demonstrated acceptable internal reliability coefficients (Cronbach’s alpha) for the four subscales: .69 to .87.

*Social Support.* Social Support was measured by Caplan, et al’s (1975) Social Support Scale. The 12 item scale estimates the perceived level of social support received from three sources: supervisors, co-workers, and family and/or friends. The measure consists of four questions asked in relation to each of the three support sources. The four questions are: (1) ‘How much do each of these people provide help to you in relation to work matters?’ (2) ‘How easy is it to discuss your problems at work with the following people?’ (3) ‘How much have the following people provided you with practical advice, information or assistance in relation to work matters?’ (4) ‘How much is each of the following people willing to listen to your personal problems?’ Respondents answered on a 5 point Likert scale from 1 = *very much* to 5 = *don’t have such a person*. All scores were reversed so that high scores represent high levels of social support. The internal reliability coefficients for all three subscales were acceptable: .88 (Supervisor Support), .84 (Colleagues Support) and .85 (Family/Friends Support). This measure is widely utilized and has demonstrated acceptable discriminant properties between the subscales with research among numerous occupational groups (e.g., Brough, 2004; Brough & Frame, 2004; Brough & Pears, 2004; Mansell, Brough, & Coles, 2006).

*Job Satisfaction.* Job Satisfaction was measured with the 15 item measure developed by Warr, Cook, and Wall (1979). Respondents indicated on a 7 point Likert scale (1 = *extremely dissatisfied* to 7 = *extremely satisfied*) how satisfied they are with 15 job components. An example scale item is 'The amount of variety in your job'. High scores indicate high levels of Job Satisfaction. An acceptable estimate of internal reliability (Cronbach's alpha coefficients) for this measure was produced of .90.

*Work-Related Psychological Well-Being.* Finally, Work-Related Psychological Well-Being was measured with Warr's (1990) twelve item scale. Scale items consist of a list of adjectives such as: *Tense*, *Relaxed* and *Anxious*. The respondents were asked to indicate to what extent the last few weeks in their job had led them to experience each item. The respondents answered on a Likert-type scale (1 = *Never* to 5 = *All of the time*). Reverse scoring of the negatively scored items ensured that high scores represented high levels of Work Well-Being. An acceptable internal reliability statistic (Cronbach's alpha) for this measure was produced: .94.

## Results

The ten items of the Correctional Officer Job Demands measure were subject to an exploratory factor analysis (EFA: Principal Components Analysis) employing direct oblimin rotation to identify the structure of the measure. The EFA produced two factors, which accounted for 61.40% of the variance. The ten items produced acceptable factor loadings for the factors (minimum of .60) and these results are illustrated in Table 1. The first factor contains items pertaining to organizational job demands (management support, job guidelines) whilst the second factor is more operationally-focused (major incidents, offender violence). The two factors were moderately correlated with each other ( $r = .54$ ) and each factor produced an acceptable level of internal reliability (.85 and .81, respectively). These two factors (*Organizational Correctional*

*Officer Demands* and *Operational Correctional Officer Demands*) were therefore deemed suitable for inclusion within the subsequent analyses.

INSERT TABLE 1 ABOUT HERE

The descriptive statistics for each measure (mean scores, standard deviations, and alpha coefficients) and the bivariate associations between the measures (correlations) are illustrated on Table 2. Both gender and tenure were *not* significantly correlated with either of the two Correctional Officer Job Demands subscales, indicating that these job demands are experienced independently of the officer's gender or length of service. Gender produced small significant associations with Problem Solving Demands, Method Control, and Colleague Support, implying that female officers experienced higher levels of these work characteristics as compared to their male colleagues. Interestingly, the four Jackson et al. (1993) Job Demands and Job Control measures (Monitoring Demands, Problem Solving Demands, Timing Control, and Method Control) were not significantly associated with one other. However, both subscales of the Correctional Officer Job Demands measure produced significant associations with the two Job Control subscales. Similarly, neither Monitoring Demands nor Problem Solving Demands were significantly associated with Job Satisfaction or Work Well-Being. However, the two Correctional Officer Job Demands subscales produced significant negative correlations with each dependent variable. The measures of Job Control and Supervisor Support and Colleague Support also produced significant associations with Job Satisfaction and Work Well-Being in the expected directions.

INSERT TABLE 2 ABOUT HERE

The ability of the Correctional Officer Job Demands measure to predict both Job Satisfaction and Work Well-Being, in comparison with the generic Job Demands and Job Control measures (Jackson et al, 1993), was tested with hierarchical multiple regression analyses. The results of these analyses are summarized in Tables 3 and 4. It can be observed that the generic Job Demands predictors (Monitoring Demands and Problem Solving Demands) were not significant predictors of either criterion variable. However, the Correctional Officers Job Demands measure significantly predicted Job Satisfaction, but not Work Well-Being. Due to the sample size, the two Job Control subscales were entered into each equation as one composite measure, and accounted for a similar significant proportion of variance in each criterion variable. Supervisor Support also significantly predicted each criterion variable and indeed was the strongest individual predictor of Job Satisfaction. Gender also emerged as a strong predictor of Work Well-Being implying that male officers had higher levels of well-being as compared to their female colleagues. The regression equation predicting work well-being accounted for 32% of the variance in this criterion measure ( $F(7, 108) = 7.12; p < .001$ ).

INSERT TABLES 3 & 4 ABOUT HERE

Finally, the Job Demands x Job Control and Job Demands x Social Support interactions were tested in the prediction of each criterion variable. The interaction terms were constructed with standardized variables prior to entry in the equations. Only the Problem Solving Demands x Supervisor Support and Offender Demands x Supervisor Support interaction terms accounted for a significant proportion of unique variance within Job Satisfaction. The regression equation predicting Job Satisfaction in total accounted for 69% of the variance in this criterion measure ( $F(8, 102) = 28.05; p < .001$ ). The direction of influence of these interaction terms is displayed in Figures 1 and 2. High and low categories of each variable are calculated from values occurring

one standard deviation above and below the respective mean scores. Figure 1 illustrates that officers receiving high levels of Supervisor Support have higher levels of Job Satisfaction compared to officers who receive low levels of Support. Interestingly, in stressful situations (caused by interactions with offenders) the level of Job Satisfaction decreases for the high Support officers and increases for the low Support group (but Job Satisfaction still remains higher for the high Support officers as compared to the low Support group). Figure 2 illustrates that when experiencing high levels of Problem Solving Job Demands, Job Satisfaction increases for officers in receipt of high amounts of Supervisor Support. However, for officers receiving low levels of Support, Problem Solving Job Demands have no impact on their low levels of Job Satisfaction.

INSERT FIGURES 1 & 2 ABOUT HERE

## Discussion

### *Correctional Officer Job Demands*

The Correctional Officer Job Demands measure developed by this research demonstrated acceptable levels of both reliability and validity, encouraging further (confirmatory) research with this instrument. The measure reflects similar research with police populations where measures of specific police operational and organizational job demands have proved to be better indicators of adverse outcomes as compared to the generic measures of job demands (Brough, 2004, Hart et al., 1993). The ability of these generic job demands measures to produce the elusive demands-control (or demands-control-support) interaction has also been recently questioned (Mansell & Brough, 2005) and thus more specific measures of job demands may prove to be more successful in demonstrating this interaction. For high-stress occupational groups especially, sample-specific measures of job demands appear to be more appropriate. It also makes intuitive

sense that asking questions about common job demands experienced by correctional officers *should* include items pertaining to offenders.

Further testing of this measure in other samples of correctional officers is obviously required and more detailed psychometric testing of this measure (e.g., via confirmatory factor analysis) in a larger sample is recommended. However, the measure is presented here as a promising contribution to more effectively describing job demands experienced by this specific occupational group. The necessity for including sample-specific measures of job characteristics (as well as valid, generic measures) within occupational stress research is a fundamental point that is often overlooked within the literature (e.g., Quick, Quick, Nelson, & Hurrell, 1998; Van der Doef & Maes, 1999). The development of effective occupational stress interventions for these high-stress occupations tends to be more successful when local job characteristics are taken in to consideration, instead of purely relying on ‘off-the-shelf’ solutions (e.g., Brough, 2004).

It is pertinent to note that none of the Job Demands x Job Control interactions significantly contributed to the prediction of either criterion measure. This finding is indicative of recent reviews of this theoretically relevant but empirically unsupported relationship (e.g., Van der Doef & Maes, 1999). For example, Mansell and Brough (2005) found only *one* significant demands x control interaction term from the twelve terms tested. Mansell and Brough concluded that a main effects model in which job demands and job control act independently to influence psychological well-being was the most parsimonious account for their data.

### *Supervisor support*

The recent interest in supervisor support as a specific form of workplace support (Brough & Frame, 2004; Eisenberger, Stinglahamber, Vandenberghe, Sucharski, & Rhoades, 2002) was also demonstrated in the results of this research. Supervisor Support was a strong direct predictor of both Job Satisfaction and Work-Related Psychological Well-Being. Furthermore, Supervisor

Support rather than Job Control was demonstrated to moderate the relationship between Job Demands and Job Satisfaction. This moderating characteristic of Supervisor Support implies that adverse psychological outcomes caused by organizational stress can be avoided to some extent, if adequate levels of Supervisor Support are accessible. Similar to the findings reported from other occupations, these results imply that organizational stress experienced by correctional officers can be reduced by appropriate training in supportive supervision (e.g., Brough & Frame, 2004; Brough & Pears, 2004). For example, the support item with the highest mean score in the current research pertained to the availability of a supervisor to listen to an officer's *personal* problems (as well as being receptive to work specific issues).

The influence of any *occupation-specific* supervisor support items has also been raised although not yet empirically considered within the literature. Similar to the discussions concerning job demands, the premise that *specific* items of support may have a greater influence than the items contained within generic support measures has intuitive value. However it is also acknowledged that much of the support provided in the workplace appears to be encompassed by the theoretical (and thus generic) support constructs. Thus providing advice, clarifying procedures and policies, and practical assistance with work problems appear to be aptly described by the problem-focused type of workplace social support, whilst providing understanding and empathy for work and/or personal problems is currently included in the construct of emotional support. Whether any additional, measurable occupation-specific supervisor support practices also occur is an interesting consideration for future investigation.

### *Research limitations*

The response rate (37%) achieved by this research requires consideration. Whilst this response rate represents just over one third of individuals who were invited to participate with this research, such a return rate is about average for self-report survey responses and is generally

anticipated (i.e., self-report survey research designs typically sample three times as many respondents as is statistically required, in order to account for non-response and respondent attrition). Self-report survey research evaluating occupational stress within comparable occupational groups reports similar response rates: for example 39% response rate from professional managers (Brough, O'Driscoll, & Kalliath, 2005), 24% from paramedics (Brough, 2005) and 46% from both customs officers and police workers (Brough, 2004; Mansell & Brough, 2005). The characteristics of the research respondents were not considered to differ markedly from the non-respondents according to this organization's Human Resource data; the respondent's gender, age, tenure, and rank generally represented the average levels within these five correctional facilities. A potential deterrent for response may have been the distribution of the surveys by the organization's internal mail system (thus raising concerns of confidentiality within the recipients) and this should be considered for future investigations with this occupational group.

### *Conclusions*

In conclusion, this research demonstrated the importance of including robust sample-specific measures of job characteristics in occupational stress investigations. This research demonstrated a significant attempt to address this omission within the high-risk occupation of correctional services. We emphasize that sample-specific measures of job demands such as the measure described within this research, in combination with other off-the-shelf measures and included within robust research designs, are necessary before this endemic health problem can be effectively addressed within high-risk industries. The research also demonstrated that supervisor support measured as a specific source of workplace social support, significantly reduces the impact of job demands upon adverse job satisfaction for correctional officers. The implications of



this result in terms of training supervisors to provide high quality support to their subordinates, is predicted to be a fruitful avenue for occupational stress researchers.

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Table 1. Exploratory Factor Analysis structure matrix for Correctional Officer Job Demands  
( $N = 132$ )

<i>Items</i>	<i>Component</i>	
	<i>1</i>	<i>2</i>
1. Lack of decision-making	<b>.80</b>	.30
2. Lack of management support	<b>.79</b>	.30
3. Having little authority	<b>.78</b>	.21
4. Lack of clear guidelines	<b>.77</b>	.33
5. Understaffing and resource inadequacy	<b>.76</b>	.47
6. Conflict between controlling and helping offenders	<b>.68</b>	.64
7. Possibility of violence from offenders	.33	<b>.85</b>
8. Being constantly alert	.41	<b>.79</b>
9. Experiencing major incidents	.19	<b>.79</b>
10. Allegations from offenders	.48	<b>.60</b>

Table 2. Intercorrelations and descriptive statistics ( $N = 132$ )

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	<i>M</i>	<i>SD</i>
1. Gender	-													
2. Tenure	-.17*	-											10.24	5.63
3. Monitoring Demands	.16	-.16	(.79)										4.23	.62
4. Problem Sol Demands	.18*	-.04	.58***	(.69)									3.93	.61
5. Timing Control	.08	-.06	.10	.17	(.83)								3.33	.84
6. Method Control	.18*	-.06	.04	.07	.70***	(.87)							3.27	.88
7. COJD: Organizational	-.08	.11	.08	.10	-.19*	-.27**	(.85)						3.66	.96
8. COJD: Operational	-.02	.08	.31***	.11	-.21*	-.20*	.54***	(.81)					3.04	.95
9. Supervisor Support	.12	-.08	.21*	.16	.13	.18*	-.27**	-.04	(.88)				3.59	.87
10. Colleagues Support	.18*	-.08	.16	.12	.02	-.06	-.08	.09	.40***	(.84)			3.83	.73
11. Job Satisfaction	.01	-.15	.00	.06	.43***	.49***	-.61***	-.41***	.57***	.24**	(.90)		3.72	1.06
12. Work Well-Being	-.12	-.11	.02	.12	.36***	.44***	-.28**	-.22*	.29***	.03	.48***	(.94)	3.27	.80

N.B. All tests are two-tailed. \* $p < .05$ ; \*\* $p < .01$ , \*\*\* $p < .001$ . COJD = Correctional Officer Job Demands.

Cronbach's alpha coefficients are depicted in parentheses along the diagonal; Gender is dummy-coded 0 = males, 1 = females.

Table 3. Moderated hierarchical regression analyses predicting Job Satisfaction ( $N = 132$ )

<i>Predictors</i>	<i>Step 1 <math>\beta</math></i>	<i>Step 2 <math>\beta</math></i>	<i><math>R^2</math></i>	<i><math>R^2 \Delta</math></i>
COJD: Organizational	-.32***	-.28***	.66***	
COJD: Operational	-.14*	-.14*		
Monitoring Demands	-.16*	-.13		
Problem Solving Demands	.11	.08		
Job Control	.33***	.32***		
Supervisor Social Support	.40***	.41***		
COJD: Operational x Supervisor Support		-.15**	.69***	.03**
Problem Sol Demands x Supervisor Support		.15**		

$\beta$  = Standardised beta coefficients. \* $p < .05$ ; \*\* $p < .01$ , \*\*\* $p < .001$ ;

COJD = Correctional Officer Job Demands.



Table 4. Regression analyses predicting Work Well-Being ( $N = 132$ )

<i>Predictors</i>	$\beta$	$R^2$
Gender	-.21**	.32***
COJD: Organizational	-.08	
COJD: Operational	-.10	
Monitoring Demands	-.04	
Problem Solving Demands	.14	
Job Control	.32***	
Supervisor Social Support	.27***	

$\beta$  = Standardised beta coefficients. \* $p < .05$ ; \*\* $p < .01$ , \*\*\* $p < .001$ ;

COJD = Correctional Officer Job Demands, Gender is dummy-coded 0 = males, 1 = females.

Figure 1. Interaction of Correctional Officer Operational Job Demands and Supervisor Support on Job Satisfaction

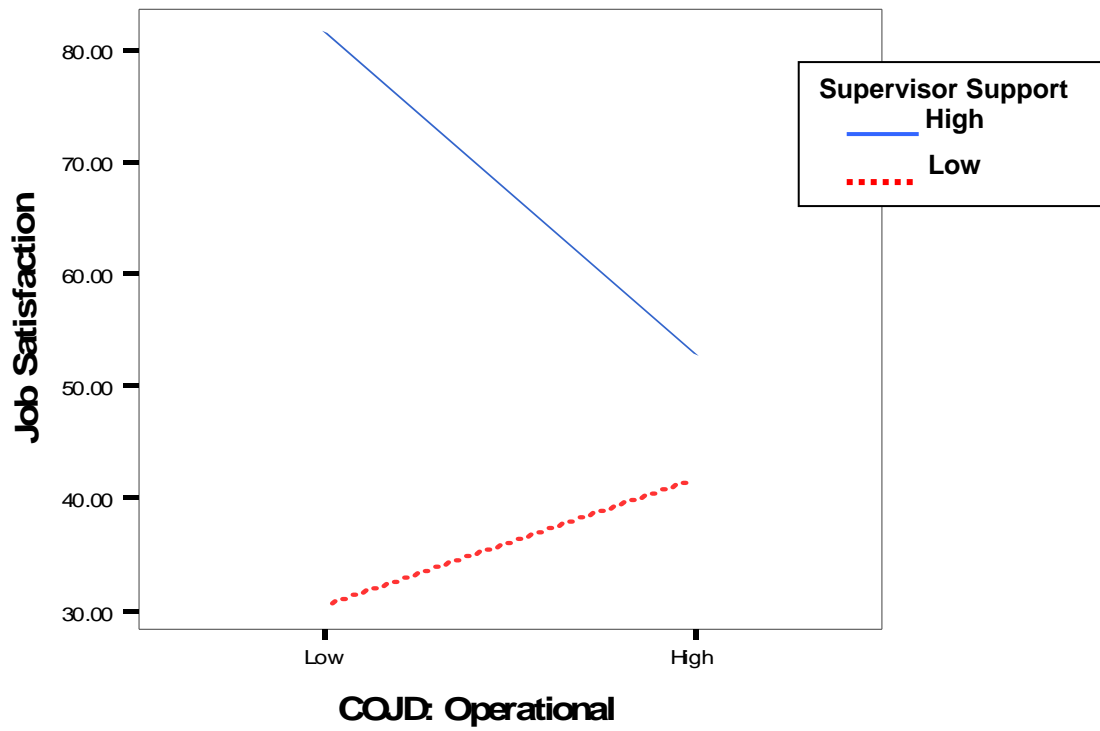
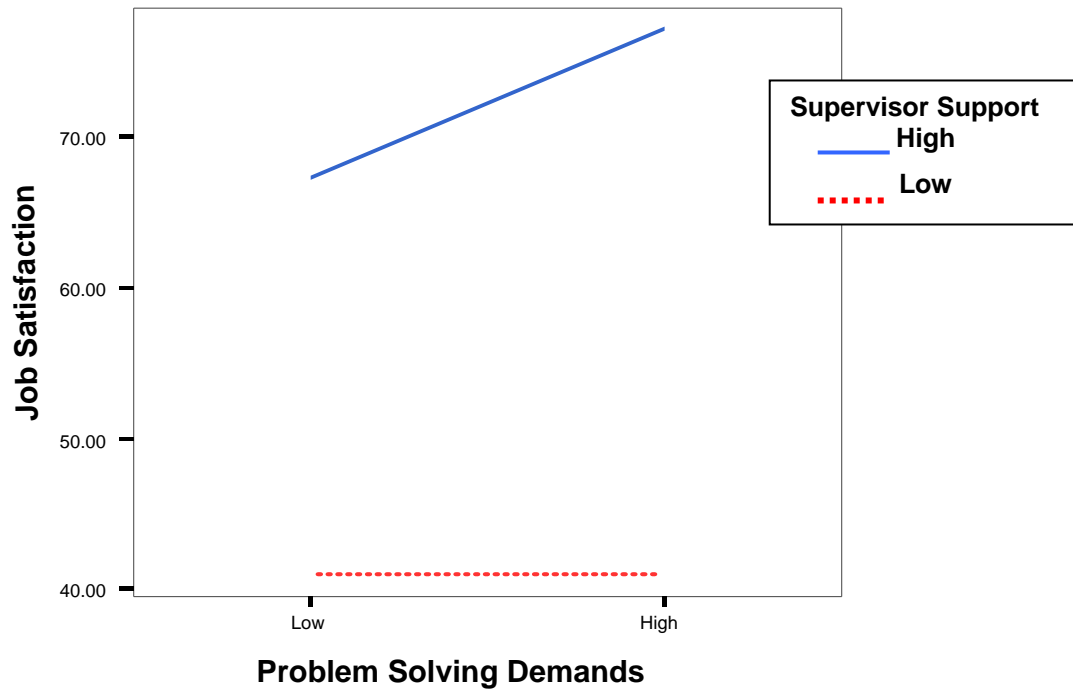


Figure 2. Interaction of Problem Solving Job Demands and Supervisor Support On Job Satisfaction



## Appendix A

### *Correctional Officer Job Demands*

Please indicate to what extent each item causes you stress in your job. Circle your answer using the key below as a guide.

		<b>Not at all</b>	<b>Just a little</b>	<b>A moderate amount</b>	<b>Quite a lot</b>	<b>A great deal</b>
1.	Possibility of violence from offenders.	1	2	3	4	5
2.	Fear of allegations from offenders.	1	2	3	4	5
3.	Lack of clear guidelines for job performance (inconsistent management practices).	1	2	3	4	5
4.	Having too little authority to carry out the responsibilities you are assigned.	1	2	3	4	5
5.	Conflict between having to control and help offenders.	1	2	3	4	5
6.	Involvement in major incidents e.g. death in custody, overdose, escape.	1	2	3	4	5
7.	Lack of support from management.	1	2	3	4	5
8.	Having to be constantly alert and on guard.	1	2	3	4	5
9.	Understaffing and resource inadequacy.	1	2	3	4	5
10.	Lack of consultation or opportunity to participate in decision making.	1	2	3	4	5