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Chapter X: Comparing the Impact of Occupation-Specific and Generic Work Characteristics

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Abstract

This chapter discusses the value of assessing occupation-specific job characteristics, in addition to the common measurement of generic job characteristics. We review some key examples of how occupation-specific assessments have contributed to the literature, with a particular focus on research conducted within the Asia-Pacific region. The chapter also discusses the theoretical contributions drawn from occupation-specific job characteristic research and the practical implications this research has for organisational psychological health interventions with high-risk of stress workers (e.g., police, corrections, and health workers). The chapter illustrates these discussions with two cases studies; one describing how the specific job demand of euthanizing animals is a significant job stressor for veterinary nurses, while the second case study examines the value added to assessments of health by measuring correctional worker's interactions with offenders. Finally, the chapter reviews the recent interest in assessing occupation-specific job characteristics and we suggest this is a highly relevant research topic for researchers based within the Asia-Pacific.

Introduction

Empirical assessments of occupational health have generated substantial evidence that a broad array of job characteristics impact upon an equally broad array of employee health and performance outcomes (e.g., Brough, O'Driscoll, Kalliath, Cooper, & Poelmans, 2009). Two distinct approaches to assessing job characteristics and outcomes have emerged within this literature. The first involves the measurement of generic job characteristics and outcomes that are commonly encountered in most occupations and job roles. Generic assessments of job characteristics are primarily influenced by the job design literature, and have formed the basis of several influential organizational psychology theories, including the job characteristics model (Hackman & Oldham, 1976), the job demands control model (JD-C; Karasek, 1979), the job demands control support model (JDC-S; Johnson & Hall, 1988), Warr's work-related well-being model (WWB; Warr, 1990), and the effort-reward imbalance model (E-RI; Seigrist, 1996). Theoretical models based upon generic measures of job characteristics and outcomes are credited with improving insights into the experience of well-being and motivation at work, stimulating an extensive body of research, and informing numerous workplace intervention and job redesign strategies (Houkes et al., 2001).

The second approach recognizes the value of including occupation-specific job characteristics and outcomes and has developed alongside generic job characteristics measures. The development of occupation-specific measures is driven largely by the research context and involves assessing job characteristics that are specific to a single or limited number of occupational groups. Occupation-specific measures focus on salient features of the job context, and are valued for their increased face validity (e.g., Brough & Frame, 2004; Cooper, Dewe, & O'Driscoll, 2001) and relevance in the development of targeted organizational interventions (Cooper et al., 2001; O'Driscoll, Brough, & Kalliath, 2009).

Although the merits and limitations of each approach are often discussed, empirical studies directly comparing the two approaches are limited. This is unfortunate, given that the few studies comparing the approaches have shown that additional variance is explained when both generic and occupation-specific assessments of work characteristics are conducted (e.g., Brown, Fielding, & Grover, 1999; Brough, 2004; Kop, Euwema, & Schaufeli, 1999). Assessments of work characteristics and outcomes should ideally incorporate both occupation-specific and generic measures to provide a comprehensive perspective of occupational health that balances the advantages and limitations of each approach. While researchers increasingly advocate for multifaceted assessments of work characteristics (e.g., Brough & Biggs, 2010; Cartwright & Cooper, 1997; Cooper et al., 2001; Keinan & Malach-Pines, 2007; Wall, Jackson, Mullarkey & Parker, 1996) these recommendations are unfortunately rarely heeded.

This chapter presents a brief history of the emergence of both approaches, discussing advantages and limitations for each. The chapter presents key international and local Asia-Pacific research comparing generic and specific job characteristics. Two case studies providing a detailed description of approaches to the measurement of both generic and occupation-specific work characteristics in two unique occupational groups are also discussed. Finally, we discuss current challenges and future directions for the assessment of generic and occupation-specific work characteristics and outcomes.

Theoretical Approaches Explaining Generic Job Characteristics

The early formal work undertaken to classify jobs and to define the actual functions of work is useful in establishing the common type of demands that paid employment requires of employees. Fine's categorization of the characteristics and requirements of millions of economic jobs resulted in the creation of the *Dictionary of Occupational Titles* and its more recent web-version *O*NET* (Fine, 1955; Peterson, Mumford, Borman, Jeanneret, & Fleishman, 1995). Fine suggested that every job consists of demands arising from three core dimensions: *data*, *people*, and *things*. Furthermore it is the *complexity* and the *time* taken up by each of these three dimensions that is important in assessing the actual functions and demands of a job. When we consider more contemporary descriptions of job demands it is pertinent to note that these demands remain fundamentally based on a worker's time and interactions with *data*, *people*, and *things*.

Explanations of key job characteristics have been provided by several influential models, generated for the purpose of ordering job characteristics research into coherent theoretical models, clarifying causal patterns and establishing key job characteristics and outcomes (Houkes et al., 2001). One key model, for example, is the job

characteristics model (Hackman & Oldham, 1976), which described five core job characteristics that are central to work performance and employee motivation and job satisfaction. These five characteristics consist of: *task variety*, *job autonomy*, *job feedback*, *task significance*, and *task identity*. Importantly, Hackman and Oldham also identified the influence of individual employee's discretion for each of these characteristics (i.e., how much of each characteristic they desired and could achieve in their job) that resulted in their growth and motivation for their work.

From this and similar theoretical models, the focus on the actual demands of a job have tended to emphasize the amount of job task variety, number of tasks, and time to complete tasks that a job requires from its workers, i.e., an assessment of *workload*. Formal assessments of workload have been proposed and utilized, which focus on job demands that are common (generic) to most occupations. Such measures typically ask workers to rate how much their work requires their *undivided attention* or how much discretion they have to *plan their own work* (Wall, Jackson, & Mullarkey, 1995).

Several organizational psychology theories have been proposed, most of which focus on a limited number of generic job characteristics. Cox and Griffiths (2010) reviewed several of these theories, to emphasize the commonalities amongst them. They noted that each of the theoretical approaches possess a common framework of describing occupational health as a process involving the interaction between individuals and the organizational context. Furthermore, the theories describe a limited range of key variables "built around notions of demand, control, and support with variations including ability, needs, effort, coping, and reward" (p. 48). Most of these theories focus on general concepts that are applicable to a wide range of situations and occupational contexts (van Veldhoven et al., 2005, p. 8). Finally, standardized work characteristics measures based on these theories have been developed for use in a multitude of occupational contexts; a major benefit of this generalizability is the ability to establish normative data for comparative purposes.

Despite these advantages, several limitations of these occupational health theories and their associated measures have been discussed. Criticisms have primarily centered on their limited scope, specifically, their focus on a limited range of generic variables presumed to be equally applicable across unique occupational roles and contexts (Cox & Griffiths, 2010). This is problematic as it "obscures and ignores" other important work characteristics that may influence well-being and motivation (Narayanan et al., 1999, p. 64). Research generally supports these criticisms, by demonstrating that elements of work beyond those included in traditional occupational health theories often have a greater impact on outcomes (discussed in detail below). Overall, empirical evidence suggests that a greater number of work characteristics should be considered in order to provide a more comprehensive account of well-being and motivation, as there is seemingly "more to job stress than demands, control, and social support" (van Veldhoven et al., 2005, p. 7).

In summary, these generic assessments of job demands are valuable for the purpose of evaluating common job characteristics across all employment sectors. The main advantage of these generic assessments is that they are cost-effective, simple to administer and, importantly, provide scores that can be compared to published normative data. Generic assessments of job demands have also contributed to the redesign of numerous job roles and formed the foundation of influential organizational psychology theories including, for example, Karasek's (1979) job demands-control (JDC) model, Johnson and Hall's (1988) job demands-control-support (JDCA) model, and Warr's (1990) work-related well-being model.

Occupation-Specific Approaches to Explaining Stress

Apart from focusing on a limited number of variables, a disadvantage of research drawing on traditional occupational health models is the presumption that global approaches to assessing work characteristics can be effectively applied to all occupational roles and contexts (Sparks & Cooper, 1999). Generic measures of work characteristics seldom meet the requirements of academics or organizational stakeholders in applied organizational research contexts (Brough & Biggs, in press -a; Brough & Biggs, in press -b). It has been recommended widely that theoretically derived occupation- or context- specific measures be derived to meet both research and organizational needs, and to provide a more comprehensive understanding of the impact of work characteristics on outcomes (Sparks & Cooper, 1999). Thus, the development of occupation-specific measures of work characteristics and outcomes has occurred in tandem with generic measures.

Unlike the 'laundry list approach', occupation-specific measures are developed with reference to theoretical models. For example, several occupation-specific measures derived from the JDC model have been developed

for use in samples of physicians (Johnson et al., 1995) and teachers (van der Doef & Maes, 2002). Within law enforcement research, occupation-specific measures often reflect the theoretical distinction between organizational and operational job characteristics (Brough & Williams, 2007; Brough & Biggs, in press -a). The use of theoretically derived occupation-specific measures has been associated with several theoretical and practical advantages, including increased face validity for the research participants (Dewe & Guest, 1990), improved application to intervention development (C.L. Cooper et al., 2001) and for providing greater support for occupational health theoretical models (Brough & Biggs, in press -a).

Occupation-specific measures play an important role in informing the development, implementation, and evaluation of occupational health interventions. Interventions based upon occupation-specific models and measures are likely to have a greater relevance than off-the-shelf interventions based upon generic theoretical principles (Sparks & Cooper, 1999; p. 219). Intervention strategies possessing a higher degree of relevance to the workplace, in turn, are evaluated more positively by potential participants and produce sustainable workplace changes (Brough & Biggs, 2010; Cooper et al., 2001). For example, Narayanan et al. (1999, p. 71) noted that occupation-specific characteristics “may be more amenable to interventions and change than more global measures of stress.”

Although studies directly comparing generic and occupation-specific work characteristics measures are rare, those that have compared them have demonstrated that the occupation-specific measures tend to explain a greater proportion of variance in outcomes (van der Doef & Maes, 2002; Xanthopoulou et al., 2007). In addition, greater support for organizational theories has been demonstrated when occupation-specific measures are utilized. For example, greater support for the somewhat elusive JDC and JDCS interaction terms has been demonstrated for occupation-specific measures compared to generic measures (van der Doef & Maes, 2002). Reviewers of JDC and JDCS research have pointed out the interaction effects are less likely to be observed in large heterogeneous samples because of the diversity of occupations and job characteristics (de Jonge et al., 2000). For example, de Jonge et al. (2000) tested the JDC model in several occupational groups and determined that interaction effects between demands and control occurred only for specific occupational groups. Interactions were more likely to occur for emotional demands, which were more relevant to the occupational groups sampled than other measured demands. Finally, de Jonge et al. found an interaction effect between emotional demands and control that was inconsistent with the JDC model, due to the occupational group sampled. Overall, they concluded that occupation-specific measures of JDCS “could improve the predictive power” of the JDC model (p. 281).

Despite the greater face validity and ecology of using occupation-specific measures, there are several disadvantages to their use. Specifically, the lack of external validity, inability to make comparisons with established norms, and time-consuming process of developing measures for different occupations (Latack & Havlovic, 1992; Wall, Jackson, & Mullarkey, 1995). Additionally, van Veldhoven et al. (2005) caution against moving too far from general occupational health models, which are “still quite adequate in most situations” (p. 9); while occupation- or situation-specific measures may be useful in homogenous research populations, “they add relatively little detail in examinations of heterogenous data sets” (p. 22).

Studies Incorporating Occupation-Specific and Generic Work Characteristics

Research assessing occupations such as policing, nursing, and teaching has identified the value of including *specific measures* of job demands. For example, Hart, Wearing, and Headey (1995) demonstrated that a police-specific job demands measure successfully accounted for significant amounts of variance within the assessment of the quality of work-life and the psychological well-being of police officers. This observation has also received support from other occupational stress researchers who have, for example, tested specific measures of job demands in samples of police officers (Brough, 2004), teachers (van der Doef & Maes, 2002), and fire-fighters (Tuckey & Hayward, 2011).

A pertinent local example of research investigating the impact of both generic and specific assessments of job demands is the work by Brough, Biggs and colleagues in their evaluations of the occupational stress experienced by correctional workers. Corrections is generally considered to be a high-stress occupation for correctional workers due to commonly experienced operational stressors such as perceived danger and threats to physical safety from offenders. For example, Keinan and Malach-Pines (2007) estimated that 38% of corrections workers experienced traumatic events involving physical injury caused by offenders. Furthermore,

the most common job demands experienced by correctional workers involved offender interactions such as managing offenders' special needs and exposure to deviant and manipulative offender behavior (see also Brough & Biggs, 2010). Brough and Williams (2007) described the consequences of these prolonged job demands upon correctional workers' health outcomes and job performances. Brough and Williams also noted the considerable financial costs to the organization attributable to the worker's experiences of these job demands: "Adverse organizational consequences of stress also impact on correctional center budgets due to staff illness, turnover, required overtime, early retirement, and workers' compensation claims" (p. 556).

Generic job demands are, of course, also relevant to correctional work. Job demands describing the organizational structure (e.g., most typically reported as being hierarchical, bureaucratic, and militaristic) and the functioning of correctional departments have been reported to be significantly associated with psychological strain and work attitudes such as low levels of job satisfaction, work engagement, and high turnover intentions (Brough & Williams, 2007; Dollard & Winefield, 1998; Summerlin, Oehme, Stern, & Valentine, 2010). However, the impact of *generic* job demands upon correctional worker's health and job performance outcomes is often reduced when *specific* job demands are also measured. For example, in an assessment of formal occupational stress claims submitted by correctional workers, Brough, Biggs, and Pickering (2007) identified that only *job-specific* characteristics (e.g., submission of grievance reports by offenders, specific correctional job roles) were significant predictors of occupational stress claims. No generic job demands (e.g., workload) were found to be significantly associated with the submission of an occupational stress claim.

Ideally, assessments of occupational stress should, of course, include *both* specific and generic measures of job demands in order to provide a detailed and comparable representation of the work environment. This multifaceted assessment of job demands has been widely recommended (Brough & Biggs, 2010; Cooper et al., 2001) but is typically overlooked. This is unfortunate given that research has documented the additional variance explained when a multi-faceted assessment of job demands is conducted (Brough, 2004; Brown, Fielding, & Grover, 1999). For example, Wall, Jackson, Mullarkey, and Parker (1996) acknowledged the accurate assessment of job demands has suffered from a general "lack of correspondence between theoretical constructs and measures which may have undermined the accumulation of adequate evidence" (p. 164). Wall et al. recommended that this line of inquiry should be pursued by further research. More recent research also continues to identify the need to focus on occupation-specific work characteristics in order to provide a greater insight into both theoretical explanations of job strain and practical recommendations to improve worker's health and job attitudes (Mauno, Kinnunen, Mäkikangas, & Feldt, 2010).

In order to accurately assess specific job demands commonly experienced by correctional workers, Brough and colleagues developed a specific instrument, the *Correctional Job Demands Measure* (Brough & Biggs, in press -a; Brough & Williams, 2007). The measure consists of 14 job specific items asking correctional workers about their experiences of violence and harassment from offenders, their need to be constantly alert for their own personal safety and about their experiences in major incidents (e.g., death, overdose, and injuries to colleagues). The authors compared the impact of this specific job demands measure with an off-the-shelf generic job demands measure, which measured items such as workload, work time demands and problem-solving task demands. Brough and Biggs (in press -a) reported that the correctional job demands measure produced significant associations with all four criterion variables (job satisfaction, work engagement, turnover intentions, and psychological strain) while the generic job demands did not. The authors concluded that their results "reinforce suggestions that the accurate estimation of occupational stress and/or mental health for workers within high-risk occupations is best assessed by occupation-specific job demands" (p. 15).

A second example of Asian-Pacific research in this field was conducted by Noblet, Teo, McWilliams, and Rodwell (2005) in their assessment of Australian public sector employees. Noblet et al. noted that a number of specific job demands had a significant detrimental impact on employee health and performance indicators, over and above the impact of generic job demands. Such specific job demands included, for example, issues of pay and the availability of some human resource services. Noblet et al. concluded that assessing both generic and specific job demands is valuable in maintaining and improving the quality of working life experienced by public sector employees.

A final example evaluating generic and specific job demands was conducted among a sample of Australian nurses by Teo, Yeung, and Chang (2012). Teo et al. assessed the impact of specific nursing administrative job demands including, for example, "insufficient time to take meal breaks" and "unrealistic performance targets." Teo et al. found that these job specific demands did have a negative impact on outcome variables including psychological health, job satisfaction, and organizational commitment. Teo et al. also noted that the specific nursing administrative job demands concerning pay, recognition, and resource constraints were associated with

job dissatisfaction. These authors concluded that nursing managers should certainly take into account these job specific demands, as well as generic job demands, to implement strategies designed to produce and to retain a psychological healthy and productive nursing workforce.

Case studies

Case Study 1: Killing me Softly: Assessing the Job Demands of Animal Care Workers

Background:

Veterinary work has been identified as an occupation at high risk of occupational stress, due to the unique stressors experienced by these personnel. However, while empirical research on occupational stress in human health services is well established, comparatively few studies have addressed occupational stress in animal care workers. Moreover, the majority of the research conducted in animal care workers has failed to examine occupational stress in accordance with established occupational stress theories. A recent Australian study conducted by Black, Winefield, and Chur-Hansen (2011) provided a rare theoretical assessment based upon the job-demands-control-support model (Johnson & Hall, 1988). Black et al.'s findings indicated that approximately one third of animal care workers reported high demand-low control work conditions, and that levels of workplace social support were effective for reducing their occupational strain. Furthermore, Black et al. noted that the job-specific demand of involvement in animal euthanasia was significantly associated with burnout. This finding is consistent with previous research, which has identified that animal care workers with euthanasia responsibilities are more likely to report increased job stress, work-family conflict, somatic complaints, traumatic stress reactions, substance abuse, and decreased job satisfaction (Reeve, Rogelberg, Spitzmuller, & DiGiacomo, 2005; Rohlf & Bennett 2005).

Whilst research supports the assertion that euthanasia responsibilities have the potential to evoke adverse stress outcomes in animal care workers, the influence of associated job demands involving exposure to animal suffering and assisting with animal deaths have yet to be fully assessed. Furthermore, the impact of workloads and emotionally stressful interactions with animal owners, for occupational stress outcomes for animal care workers has not to date been fully assessed from an organisational psychology perspective.

Results:

Deacon (2013) conducted a research project with the aim of providing a comprehensive understanding of the factors associated with occupational stress in Australian animal care workers. In particular, the researchers investigated the impact of both generic and occupation-specific characteristics in assessments of psychological burnout, psychological strain, and work engagement. It was found that occupation-specific job demands such as the death and/or suffering of a patient (animal) were identified as frequently occurring stressors by the respondents. Furthermore, in the prediction of employee's psychological burnout, the impact of occupation-specific job demands was significantly moderated by levels of social support; veterinary nurses exposed to patient death and suffering as a frequent job demand and who reported high levels of workplace social support experienced lower levels of burnout, compared to veterinary nurses who reported low levels of workplace social support.

Implications:

The results support the value of including occupation-specific job characteristics in the assessment of the psychological health of veterinary nurses/animal care workers. The exposure to the suffering and deaths of animals was rated as a frequently occurring job task and produced significant associations with the three psychological health outcome variables. The results also provide a basis for future investigations of personality and coping styles in relation to the wider animal care workforce.

Acknowledgment:

We formally acknowledge the research conducted by Rebecca Deacon (2013) and her kind permission for this work to be included here in this case study.

Case Study 2: Stress experienced by prison staff

Background

Correctional employees are responsible for the supervision and rehabilitation of offenders serving sentences in prisons, or probation and parole orders within the community. Research has consistently demonstrated the high-stress nature of corrections work compared to other occupational groups, as evidenced by high levels of psychological ill-health, absenteeism, turnover and mental stress claims (e.g. Johnson et al., 2005; Lambert et al., 2006; Dollard & Winefield, 1995; Australian Safety and Compensation Council, 2008).

Correctional employees are exposed to a range of unique operational and organizational stressors. These include increased threat of exposure to violence and allegations from offenders. Stressors originating from sources external to the workplace, such as the poor social image of corrections, are also unique to this occupational group. In addition, the hierarchical, militaristic structure that typically exists in correctional organisations is another key source of stress. For example, increased stigma associated with stress discourages employees from seeking social support at work (Brough & Biggs, 2010, Brough et al., 2007). Moreover, generic job demands and organizational stressors are also relevant to Corrections employees. For example, inadequate remuneration, understaffing, lack of recognition, work overload and lack of promotional opportunities are stressors that are common to all occupations (Botha & Pienaar, 2006; Keinan & Malach-Pines, 2007).

Recent Australian research (Biggs, 2011) investigated the role of both generic job demands and occupation-specific job demands on Correctional Officer's stress and wellbeing. As mentioned previously in this chapter, although widely recommended, the inclusion of both generic and specific job demands in occupational stress research is scarce. This research therefore explicitly addressed the dearth of research in this area, in a sample of correctional workers.

Aims and hypothesis

The impact of generic and occupation-specific job demands on psychological strain, engagement, and burnout was examined. It was hypothesized that occupation-specific demands would have a stronger impact on work characteristics and well-being outcomes compared to generic work demands measures.

Method

A total of 809 Corrections employees participated in this research. Participants completed a survey package, consisting of published, standardized measures for generic job demands, job control, social support, coping, engagement, psychological strain, and burnout. In addition, the Correctional Job Demands Measure (Brough & Biggs, in press -a; Brough & Williams, 2007) was also included to measure corrections-specific organizational and operational demands.

Results

The findings produced partial support for the hypothesis. In particular, both generic job demands and corrections-specific demands (organisational stressors only) were significantly related with engagement and work-related burnout, and indirectly associated with psychological strain. Consistent with the hypothesis, corrections-specific organisational demands were more strongly associated with outcomes compared to the generic job demands. Corrections-specific operational stressors did not have a significant direct effect on psychological strain, engagement or burnout. However, the results demonstrated the adverse effect of operational stressors, when job-related and social resources were lower.

Implications

These findings reinforce the argument that a multifaceted assessment, including both generic and occupation-specific demands provides a more accurate assessment of work characteristics. Therefore, these findings have important implications for researchers and practitioners involved in the design and implementation of occupational stress management interventions. In particular, the simultaneous measurement of generic and occupation-specific demands is effective for informing targeted occupational stress interventions that are appropriate for the organizational context, therefore increasing the probability of achieving improved health and wellbeing outcomes.

Challenges and Future Directions

It is apparent that research is increasingly recognizing the value of assessing occupational-specific job characteristics as well as generic job characteristics. We suggest that this interest will continue to increase as occupational health researchers continue to include both more sophisticated research designs and statistical analysis techniques to improve their assessments of employee's well-being and performance. We hope that adopting a dual approach of *simultaneously* assessing both specific and generic job characteristics will increase in occurrence.

One pertinent direction for future research is to test these occupation-specific measures across multiple international samples of the same type of workers. The most progress here, for example, has been made with assessing police officer-specific job characteristics, although primarily still within samples from countries with similar cultural orientations (i.e., Australia, New Zealand, UK; Brough & Biggs, 2010). The assessment of the influence of national cultural variations is valuable for theory-testing beyond purely Western samples (Brough et al., in press), and this, therefore, is a highly pertinent research avenue for researchers within this Asian-Pacific area in particular. For example, calls for published research significantly contributing to scholarly discussions utilizing samples that are not European or US-based have been issued (Cadogan, 2010; Gelfand, Leslie, & Fehr, 2008).

A second pertinent area for future research in this field is the scholarly application of these occupation-specific assessments of job characteristics to organisational training and intervention programs. Brough and O'Driscoll (2010) noted the general lack of controlled intervention studies with appropriate research designs (e.g., control groups, pre and post testing, objective evaluations, etc.). Brough and Biggs (in press -a) reported that organisational interventions for improving psychological health with high-risk of stress populations are most effective when such training is specifically-targeted to the sample in question. Generic 'off the shelf' psychological training courses typically lack face validity and, therefore, often struggle to produce sustainable improvements in psychological health and work attitudes for these workers. Assessing occupation-specific job characteristics that are then used to inform the targeted content of psychological health interventions is considered to be an effective method to improve the effectiveness of these interventions (see also: Brough & Biggs, in press -b).

Conclusion

The chapter provided a brief review of the development of tests of both generic job characteristics and occupation-specific job characteristics and we briefly described the key theories to which such assessments contribute. We noted the recent interest in assessing occupation-specific job characteristics and suggested this was for two key reasons: increased face validity for the participants (e.g., asking prison workers about the job demands arising from offender's behaviours) and secondly, for improving theory-testing purposes, particularly in relation to discussions of significant demands x control/support interaction terms and in terms of theory testing with employee samples holding different cultural values. We also noted the renewed interest in increasing the efficacy of organizational psychological health interventions and the recognition of how assessments of occupation-specific job characteristics can often improve both the content and face validity of such programs. The chapter has brought attention to the recent interest in assessing occupation-specific job characteristics and we suggest this is a highly relevant research avenue for researchers based within the Asian-Pacific region.

References

- Australian Safety and Compensation Council (2008) Compendium of workers' compensation statistics Australia 2005-2006. Canberra, ACT: Australian Government
- Biggs AJ (2011) A longitudinal evaluation of strain, work engagement, and intervention strategies to address the health of high risk employees. Unpublished Doctoral thesis. Griffith University, Brisbane

- Black AF, Winefield H, Chur-Hansen A (2011) Occupational stress in veterinary nurses: Roles of the work environment and own companion animal. *Anthrozoos* 24: 191-202
- Botha C, Pienaar J (2006) South African correctional official occupational stress: The role of psychological strengths. *Journal of Criminal Justice* 34: 73-84
- Brough P (2004) Comparing the influence of traumatic and organisational stressors upon the psychological health of police, fire and ambulance officers. *International Journal of Stress Management* 11: 227-244
- Brough P, Biggs A (2010) Occupational stress in police and prison staff. In: Brown J, Campbell E (Ed) *The Cambridge handbook of forensic psychology*. Cambridge University Press, Cambridge, UK pp 707-718
- Brough P, Biggs A (in press - a) Job demands x job control interaction effects: Do occupation-specific job demands increase their occurrence? *Stress and Health*
- Brough P, Biggs A (in press - b). The highs and lows of occupational stress intervention research: Lessons learnt from collaborations with high-risk industries. In: Karanika-Murray M, Biron C (Ed) *Derailed organizational stress and well-being interventions: Confessions of failure and solutions for success*. Springer, UK
- Brough P, Biggs A, Pickering S (2007) Predictors of occupational stress Work Cover claims by correctional officers. *Journal of Occupational Health and Safety - Australia and New Zealand* 23: 43-52
- Brough P, Frame R (2004) Predicting police job satisfaction, work well-being and turnover intentions: The role of social support and police organisational variables. *New Zealand Journal of Psychology* 33: 8-16
- Brough P, O'Driscoll M (2010) Organisational interventions for balancing work and home demands: An overview. *Work & Stress* 24: 280-297
- Brough P, O'Driscoll M, Kalliath T, Cooper CL, Poelmans S (2009) *Workplace psychological health: Current research and practice*. Edward Elgar, Cheltenham, UK
- Brough P, Timms C, Siu OL, Kalliath T, O'Driscoll M, Sit C, . . . Lu CQ (in press) Longitudinal application of the Job Demands-Resources model to psychological strain and engagement in cross-national samples. *Human Relations*
- Brough P, Williams J (2007) Managing occupational stress in a high-risk industry: Measuring the job demands of correctional officers. *Criminal Justice and Behavior* 34: 555-567
- Brown J, Fielding J, Grover J (1999) Distinguishing traumatic, vicarious and routine operational stressor exposure and attendant adverse consequences in a sample of police officers. *Work & Stress* 13: 312-325
- Cadogan J (2010) Comparative, cross-cultural, and cross-national research. A comment on good and bad practice. *International Marketing Review* 27: 601-605
- Cartwright S, Cooper CL (1997) *Managing workplace stress*. Thousand Oaks, CA, Sage
- Cooper CL, Dewe P, O'Driscoll MP (2001) *Organizational stress: A review and critique of theory, research, and applications*. Sage Publications, Inc, Thousand Oaks, CA
- Cox T, Griffiths A (2010) Work-related stress: A theoretical perspective. In: Leka S, Houdmont J (Eds) *Occupational Health Psychology*. Wiley-Blackwell, Hoboken, NJ, pp 31-56
- de Jonge J, Dollard MF, Dormann C, Le Blanc PM, Houtman I (2000) The demand-control model: Specific demands, specific control and well-defined groups. *International Journal of Stress Management* 7: 269-287
- Deacon RE (2013) Occupational stress in veterinary nurses: The influence of job demands and job resources on psychological strain, work-related burnout, and work engagement. Unpublished Psychology Honours thesis. Griffith University, Brisbane
- Demerouti E, Bakker AB, Nachreiner F, Schaufeli WB (2001) The job demands-resources model of burnout. *Journal of Applied Psychology* 86: 499-512
- Dollar MG, Winefield AH (1995) Trait anxiety, work demand, social support and psychological distress in correctional officers. *Anxiety, Stress and Coping* 8: 25-35
- Dollard MF, Winefield AH (1998) A test of the demand-control/support model of work stress in correctional officers. *Journal of Occupational Health Psychology* 3: 243-264
- Fine SA (1955) Functional job analysis. *Journal of Personnel Administration & Industrial Relations* 2: 1-16
- Gelfand M, Leslie LM, Fehr R (2008) To prosper, organizational psychology should adopt a global perspective. *Journal of Organizational Behavior* 29: 493-517
- Hackman JR, Oldham G (1975) Development of the Job Diagnostic Survey. *Journal of Applied Psychology* 60: 159-170
- Hackman J, Oldham G (1976) Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance* 16: 250-279

- Hart PM, Wearing AJ, Headey B (1995) Police stress and well-being: Integrating personality, coping and daily work experiences. *Journal of Occupational & Organisational Psychology* 68: 133-156
- Houkes I, Janssen PPM, De Jonge J, Nijhuis FJN (2001) Specific relationships between work characteristics and intrinsic work motivation, burnout, and turnover intention: A multi-sample analysis. *European Journal of Work and Organizational Psychology* 10: 1-23
- Jackson PR, Wall TD, Martin R, Davids K (1993) New measures of job control, cognitive demand, and production responsibility. *Journal of Applied Psychology* 78: 753-762
- Johnson J, Hall E (1988) Job strain, work place social support and cardiovascular disease: A cross-sectional study of a random sample of the working population. *American Journal of Public Health* 78: 1336-1342
- Johnson JV, Hall EM, Ford DE, Mead LA, Levine DM, Wang N, Klag MJ (1995) The psychosocial work environment of physicians: The impact of demands and resources on job dissatisfaction and psychiatric distress in a longitudinal study of John Hopkins Medical School Graduates. *Journal of Occupational and Environmental Medicine* 37: 1151-1159
- Johnson KG, Cooper CL, Cartwright S, Donald I, Taylor P, Millet C (2005) The experience of work-related stress across occupations. *Journal of Managerial Psychology* 20: 178-187
- Karasek R (1979) Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly* 24: 285-308
- Keinan G, Malach-Pines A (2007) Stress and burnout among prison personnel: Sources, outcomes, and intervention strategies. *Criminal Justice and Behavior* 34: 380-398
- Kop N, Euwema MC, Schaufeli WB (1999) Burnout, job stress and violent behaviour among Dutch police officers. *Work & Stress* 13: 326-340
- Lambert EG, Hogan NL, Allen RI (2006) Correlates of correctional officer job stress: The impact of organizational structure. *American Journal of Criminal Justice* 30: 227-248
- Latack JC, Havlovic SJ (1992) Coping with job stress: A conceptual evaluation framework for coping measures. *Journal of Organizational Behaviour* 13: 479-508
- Mauno S, Kinnunen U, Mäkikangas A, Feldt T (2010) Job demands and resources as antecedents of work engagement: A qualitative review and directions for future research. In: Albrecht SL (Ed) *Handbook of employee engagement: Perspectives, issues, research and practice*. Edward Elgar, Cheltenham, UK, pp 111-128
- Narayanan L, Menon S, Spector PE (1999) Stress in the workplace: A comparison of gender and occupations. *Journal of Organizational Behavior* 20: 63-73
- Noblet A, Teo STT, McWilliams J, Rodwell JJ (2005) Which work characteristics predict employee outcomes for the public-sector employee? An examination of generic and occupation-specific characteristics. *The International Journal of Human Resource Management* 18: 1415-1430
- O'Driscoll M, Brough P, Kalliath T (2009) Stress and coping. In: Cartwright S, Cooper CL (Eds) *The Oxford handbook of organizational well being*. Oxford University Press, Oxford, pp 237-266
- Peterson NG, Mumford MD, Borman WC, Jeanneret PR, Fleishman EA (1995) Occupational information network (O*NET) content model (Vol. I-II). Salt Lake, UT, Utah Department of Employment Security
- Reeve CL, Rogelberg SG, Spitzmuller C, DiGiacomo N (2005) The caring-killing paradox: Euthanasia-related strain among animal-shelter workers. *Journal of Applied Social Psychology* 35: 119-143
- Roberts KH, Glick W (1981) The job characteristics approach to task design: A critical review. *Journal of Applied Psychology* 66: 193-217
- Rohlf V, Bennett P (2005) Perpetration-induced traumatic stress in persons who euthanize non-human animals in surgeries, animal shelters, and laboratories. *Society & Animals* 13: 201-220
- Siegrist J (1996) Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology* 1: 27-41
- Sparks K, Cooper CL (1999) Occupational differences in the work-strain relationship: Towards the use of situation-specific models. *Journal of Occupational and Organizational Psychology* 72: 219-229
- Summerlin Z, Oehme K, Stern N, Valentine C (2010) Disparate levels of stress in police and correctional officers: Preliminary evidence from a pilot study on domestic violence. *Journal of Human Behavior in the Social Environment* 20: 762-777
- Teo ST, Yeung M, Chang E (2012) Administrative stressors and nursing job outcomes in Australian public and non-profit health care organisations. *Journal of Clinical Nursing* 21: 1443-1452
- Tuckey MR, Hayward R (2011) Global and occupation-specific emotional resources as buffers against the emotional demands of fire-fighting. *Applied Psychology: An International Review* 60: 1-23

- Van der Doef M, Maes S (2002) Teacher-specific quality of work versus general quality of work assessment: A comparison of their validity regarding burnout, (psycho) somatic well-being and job satisfaction. *Anxiety, Stress & Coping* 15: 327-344
- van Veldhoven M, Taris TW, de Jonge J, Broersen S (2005) The relationship between work characteristics and employee health and well-being: How much complexity do we really need? *International Journal of Stress Management* 12: 3-28
- Wall TD, Jackson PR, Mullarkey S, Parker SK (1996) The demands-control model of job strain: A more specific test. *Journal of Occupational and Organizational Psychology* 69: 153-166
- Wall TD, Jackson PR, Mullarkey S (1995) Further evidence on some new measures of job control, cognitive demand, and production responsibility. *Journal of Organizational Behavior* 16: 431-455
- Warr P (1990) The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology* 63: 193-210
- William J (2004) Reducing correctional officer stress: The influence of control, support and agreeableness on well-being and job satisfaction. Unpublished Masters thesis, Griffith University, Brisbane
- Xanthopoulou D, Bakker AB, Dollard MF, Demerouti E, Schaufeli WB, Taris TW, Schreus PJG (2007) When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology* 22: 766-785