How empowerment and social support affect Australian nurses' work stressors

Therese A Joiner and Timothy Bartram

Abstract

We surveyed 157 nurses at a private hospital in Melbourne to examine the role of social support and empowerment in reducing work stress among Australian nurses. Our findings reveal that social support, derived from either the supervisor or work colleagues, is negatively associated with the main work stressors, such as role conflict, role ambiguity, work overload and resource inadequacy. Empowerment, too, is negatively associated with the main work stressors, apart from work overload. We discuss contributions of this study and implications for research and practice in health sector management.

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Context of the research

Previous studies have identified nursing as a stressful occupation (Schroeder & Worrall-Carter 2002; Stordeur, D'hoore & Vandenberghe 2001; Healy & McKay 1999). Among the unique sources of stress in nursing are: high work overload (largely due to difficulties in the recruitment and retention of nurses): stress derived from shift work and associated work/family-balance issues; role conflict associated with the dual responsibilities of administration and patient care; inadequate resources; and the perceived status of nurses as second-class citizens in health care organisations (Fitzgerald 2002; Stordeur, D'hoore & Vandenberghe 2001; Santamaria 2000; Patrickson & Maddern 1996). The Nurse Recruitment and Retention Committee Report (Victorian Government Depart-

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What is known about the topic?

Nursing is a stressful occupation as a result of work overload (largely due to difficulties in the recruitment and retention of nurses), stress derived from shift work and associated work/family-balance issues, role conflict associated with the dual responsibilities of administration and patient care, inadequate resources, and the perceived status of nurses as second-class citizens in health care organisations.

What does this paper add?

A survey of nurses working in a private hospital in Melbourne found that the presence of social support networks was associated with lower perceptions of all identified stressors in the workplace and that empowerment of the nurses was associated with lower perceptions of the stressors of lack of control, reduced role conflict/ambiguity and resource inadequacy.

What are the implications for practitioners?

Health services managers can reduce workplace stress for nurses by facilitating the development of strong social support networks among nurse supervisors and co-workers and ensuring that organisational practices are consistent with increasing empowerment of nurses.

ment of Human Services 2001) concluded that nursing is increasingly becoming a physically and mentally exhausting occupation and nurses are no longer prepared to work under the resultant stress. In fact, low morale and stress are constant themes conveyed in the Report.

Work stress can be defined as an adaptive response to a work situation that places special physical and/or psychological demands on a worker (Matteson & Ivancevich 1987). The physical or psychological demands from the environment that cause stress are called stressors. The main generic stressors isolated in the broader management literature are role conflict, role ambiguity, work overload, task control (or autonomy), career security, and interpersonal relations (Kahn et

al. 1964; Kahn & Byosiere 1992; Jex 1998). The management of stress in an organisation is important because work stress has been related to worker physical and mental wellbeing as well as organisational problems, such as decreased performance (eg, quality of patient care), increased accidents, absenteeism and turnover (Cropanzano, Rupp & Byrne 2003; Stordeur, D'hoore & Vandenberghe 2001; Hackett & Bycio 1996; Manning, Jackson & Fusilier 1996; Ganster, Fusilier & Mayes 1986). Within the nursing profession, better understanding of stress and the methods of alleviating stress among nurses may be an important method of improving the quality of patient care, as well as attracting and retaining nurses in a climate of worrying nurse shortages (Creegan, Duffield & Forrester 2003; Fitzgerald 2002; Victorian Government Department of Human Services 2001; Healy & McKay 1999).

Given the prevalence of work-related stress within the nursing profession and its significant potential negative consequences in terms of absenteeism, turnover and the quality of patient care, a number of studies have addressed individual and organisational methods for coping with stress (Schroeder & Worrall-Carter 2002; Santamaria 2000; Victorian Government Department of Human Services 2001). Individual methods may include social or personal strategies such as exercise, meditation, counselling, or training through courses, seminars or workshops. Social support, which refers to individuals' interpersonal transactions with others (eg, supervisor and work colleagues) and involves providing either emotional or informational support, has proved to be an effective individual method of reducing work stress (House 1981). Although social support and work stress have enjoyed extensive coverage in the management literature, very few studies have adequately addressed the effect of social support on the specific stressors within the Australian nursing context. This is surprising, as the Nurse Recruitment and Retention Committee Report concluded that there was some evidence of a lack of support provided to some nurses from both management, in terms of leadership and training, and colleagues, in terms of support services and camaraderie. We

therefore ask the question: Does social support reduce nurse work stressors? And more specifically: Is one form of social support more effective in reducing particular stressors among nurses?

Apart from individual methods aimed at reducing or containing stress, organisational methods often target specific stressors present in the broader organisation environment. Some examples of organisation methods used to contain stress may include job redesign, change in workloads and deadlines, change in work schedules, and roleanalysis workshops (Santamaria 2000; Victorian Government Department of Human Services 2001). Although some stress studies have examined the role of organisational programs aimed at increasing worker autonomy (eg, job enrichment, establishing autonomous work groups), limited research has emerged on the role of empowerment in reducing work stress, particularly within the Australian nursing context. The US nursing literature has demonstrated that a group of hospitals known as 'Magnet' hospitals have been able to attract and retain nurses through empowerment practices (eg, expanding nurse responsibilities, creating new educational opportunities and enhancing self-esteem) (Aiken, Smith & Lake 1994; Ramano 2002). Empowerment refers to giving employees the authority, skill and freedom to perform their tasks (Spreitzer 1995). Spreitzer (1995) describes empowerment as how a person views themself in the work environment and the extent to which they feel capable of shaping their work role. Empowerment can enable the nurse to develop a sense of mastery over issues of concern not just for patients but also for the organisation and community. We argue that increased nurse empowerment is likely to reduce stress experienced at work because empowerment affords nurses the opportunity to actively utilise their knowledge, skills and abilities and to participate in and be viewed as an essential partner in the provision of health care (Brancato 2003).

The aim of this study is to examine the role of social support and empowerment in the reduction of work stress among Australian nurses. The next section develops the theory between these variables.

Theory development and hypotheses

Social support and work stressors

Social support has been defined as the flow of communication between people involving emotional, caring, informational and instrumental support (House 1981). Social support may be derived from informal sources, such as family, friends and work colleagues, or from formal sources, such as supervisors or teachers (House 1981). House's (1981) seminal work is frequently used to support the positive impact of social support on job stress. Numerous studies have linked social support with aspects of health and illness, including work stress (eg, Ganster et al. 1986; Anderson 1991; Daniels & Guppy 1994). More recent studies within the nursing context have also demonstrated the importance of the role of social support in reducing work stressors. For example, Schroeder and Worrall-Carter's (2002) qualitative study on perioperative nurse managers concluded that supervisor and peer support were critical elements in reducing stress and maintaining standards of practice and a safe environment for the delivery of patient care. Similarly, Healy and McKay (1999), in their study of occupational stress among 129 Victorian nurses, found that when nurses are not given adequate supervisor social support they become distressed.

Our study is limited to social support derived from the nurses' supervisors and the nurses' work colleagues because they appear to be more pertinent to the working environment of nurses. Supervisors and colleagues are likely to provide valuable information and feedback on nurses' work, as well as provide emotional support in a difficult working environment as outlined above. Our study also considers the effect of social support on specific stressors. It is possible that particular forms of social support may be more effective in reducing specific stressors. For example, nurse colleagues may be more useful in reducing role ambiguity, while the nurses' supervisor may be more useful in reducing stress derived from workload. Given the exploratory nature of this work, a general hypothesis associating social support and nurse work stressors is written in the null form.

H1: Social support is not associated with nurse work stressors.

Empowerment and social support

Empowerment is conceived as a multifaceted construct comprised of four cognitions reflecting an individual's orientation to his or her work. The four cognitions are: meaning (the value of a work goal); competence (an individual's belief in their capacity to perform the job requirements); self-determination (autonomy or control over work-behaviour processes); and impact (the extent to which an individual can influence outcomes at work) (Spreitzer 1995). In sum, empowerment refers to the extent to which an individual can actively shape his or her work role and context (Daniels & Guppy 1994).

Viewing empowerment in this way has particular relevance for work stress, as some consider that empowerment represents a set of work activities and practices that give power, control and authority to subordinates (Conger & Kanungo 1988). Research has consistently shown that job autonomy and participation in decision making (or worker control) is positively associated with health and wellbeing (Savery & Luks 2001). Further, in the management literature there is some discussion of the relationship between empowerment and stressors. In Karasek's (1979) demands-control stress model, for example, the researcher argues that control at work buffers the impact of job stressors on wellbeing. Also, Spector et al (2002, p. 462) reported that "the popularity of management approaches emphasizing autonomy and empowerment and beliefs of control are a vital element in the management of organisations ... Management approaches that promote individual autonomy and empowerment will work universally to enhance wellbeing". Recent research has emerged in the nursing journals on the effect of empowerment on nurse mental health and job strain. For example, Laschinger and Havens' (1997) study of 62 staff nurses in the United States shows that empowerment structures in the nurses' working environment, such as supportive relationships, decisionmaking discretion and access to vital information and resources (referred to as structural empowerment), is associated with reduced job tension. In a larger study of 400 Canadian nurses, Laschinger, Finegan and Shamian (2001) developed a model to show that structural empowerment has a posi-

tive influence on psychological empowerment (Spreitzer's 1995 conception of empowerment) which, in turn, is negatively associated with nurse job strain. The findings from this study suggest that empowering structures (such as access to information, resources, support and opportunity) create a psychological state such that nurses are more likely to find their work meaningful, feel a greater sense of autonomy and believe that they can influence outcomes at work, thereby experiencing reduced job strain. In this study of Australian nurses, we also examine psychological empowerment and its influence, in this case, on nurse work stressors. That is, does psychological empowerment affect all work stressors, or does empowerment alleviate some work stressors more than others?

Consistent with H1, the hypothesis associating empowerment and nurse work stressors is presented in the null form.

H2: Empowerment is not associated with nurse work stressors

Research methods

Sample and procedures

The sample consisted of nursing staff working in a private hospital in Melbourne, Victoria. The organisation employs about 1250 employees distributed over two inner-city sites. Nursing staff make up 59% of total employees, with other major sectors being environmental services (including cleaning and food preparation) (24%), management (10%) and miscellaneous (7%). The majority of the hospital's nursing staff are casual nurses (45%), followed by permanent part-time (38%) and full-time nurses (17%).

The survey was randomly distributed to 600 nurses within the hospital by attaching an envelope to their pay slip. Respondents were informed that the questionnaire was voluntary and conducted by researchers not affiliated with the hospital, and that the information would be treated in the strictest confidence. Anonymity was protected by requesting that respondents return the questionnaire in a reply paid envelope addressed to the researchers. A total of 157 responses were

returned, representing a response rate of 26% (5 questionnaires were subsequently omitted due to substantial missing data). The sample consisted of 97% women (industry average is 96%; mean age 41 years; mean tenure at the hospital 8 years) and clinical nurses represented 70% of the total while the remainder were nurse managers (26%) and nurse educators (4%). The majority of respondents were part-time nurses (55%), followed by full-time (37%) and casual (8%). This is not representative of the organisation's demographics, however, the low participation of casual nurses may be explained by lack of interest and/or failure to receive the questionnaire in time due to their intermittent work hours.

Measures

The social support scale developed by House and Wells (1978) was used to measure supervisor support (6 items) and co-worker support (3 items). This measure has been used previously with satisfactory reliabilities (Deery & Iverson 1995). Although the scale appears not to have been used previously in a nursing context, three nurse educators (not included in the sample) considered the wording of the items to be appropriate.

Empowerment was measured using Spreitzer's (1995) 12-item scale, which comprises the four components of empowerment: meaning, competence, self-determination and impact. This scale has been used extensively and within health care settings. The four components of empowerment emerged following a principal components factor analysis of Spreitzer's instrument (eigen values > 1 retained and the factor solution rotated using the varimax orthogonal method).

The 15-item instrument developed by Kahn et al. (1964) was used to assess nurses' work-related stress. Subsequent stress measures (such as House & Rizzo 1972) have not veered substantially from Kahn et al's (1964) main stress dimensions, and certainly the subsequent measures draw deeply from their original work. The instrument has been used extensively within management research with satisfactory reliabilities, and the role conflict/role ambiguity dimensions have been used in the nursing context (eg, Stordeur, D'hoore & Vandenberghe 2001). Again, as a check on the relevance of

the scale in the nursing context, the same three nurse educators were consulted and considered the wording of the items to be appropriate. The instrument requires self-report perceptions of how frequently respondents feel "bothered" by certain aspects of the work environment. The instrument attempts to tap into the main work stressors, such as role conflict, role ambiguity, work overload, work control, and resource inadequacy. Following a principal component factor analysis using a varimax orthogonal rotation with eigen values of >1 retained, four factors (stressors) emerged within the current sample of nurses, labelled: work control (eg, "I am unable to influence my supervisor's decisions/actions that affect me"); role conflict/ambiguity (eg, "The scope and responsibilities of my job are unclear"); resource inadequacy (eg, "I do not feel fully qualified to handle my job"); and work overload (eg, "My workload's too heavy").

Results

The means, standard deviation, alpha reliabilities and the correlation matrix of the main variables are shown in Box 1.

Multiple regression analysis was used to test the study's two hypotheses, and the results are summarised in Box 2. The results for Model 1 in Box 2

show that supervisor and co-worker social support and the empowerment dimensions of impact and competence are negatively associated with the aggregated job stress variable. To further explore the relationship between both social support and empowerment and the specific dimensions that comprise job stress, Models 2 through 5 were developed. Referring to Model 2, the results show a negative relationship between three independent variables (supervisor support, co-worker support and impact) and stress derived from lack of control over work issues. Model 3 results reveal that supervisor support, co-worker support and selfdetermination are all negatively associated with job stress derived from role conflict/ambiguity. Turning to Model 4, the regression results show that supervisor support, co-worker support, competence and self-determination are all negatively associated with resource-inadequacy job stress. Finally, Model 5 results support a negative relationship between social support (supervisor and co-worker) and stress from work overload, but a relationship between the dimensions of empowerment and work-overload stress was not supported.

Tests on the adequacy of the regression models indicate that the assumptions of the models were satisfied by the data. Tests of normality indicate that the results of each model are fairly normally

	Mean	SD	alpha	1	2	3	4	5	6	7	8	9	10
1 Supervisor support	20.70	5.46	0.92										
2 Co-worker support	11.18	2.01	0.76	0.30									
3 Meaning	12.45	1.97	0.85	0.19	0.17								
4 Impact	8.53	2.95	0.98	0.25	0.11	0.33							
5 Competence	12.70	1.62	0.91	-0.05	0.10	0.39	0.24						
6 Self-determination	10.63	2.38	0.78	0.26	0.18	0.33	0.51	0.35					
7 Composite job stress	31.03	7.39	0.83	-0.51	-0.43	-0.30	-0.33	-0.24	-0.28				
8 Work control	13.35	3.60	0.70	-0.57	-0.37	-0.26	-0.44	-0.13	-0.28	0.88			
9 Conflict/ ambiguity	6.76	2.29	0.72	-0.39	-0.37	-0.26	-0.16	-0.20	-0.33	0.75	0.49		
10 Resource inadequacy	5.73	1.94	0.66	-0.21	-0.25	-0.31	-0.19	-0.35	-0.08	0.70	0.47	0.45	
11 Work overload	11.32	2.88	0.55	-0.25	-0.24	-0.06	-0.02	-0.04	-0.05	0.61	0.48	0.31	0.30

distributed. To diagnose multicollinearity, we examined the variance inflation factors (VIFs) for the predictors. The VIFs ranged from a low value of 1 to a high value of 1.47.

On the basis of these results H1 and H2 can be rejected.

Discussion and conclusions

The aim of this study was to examine the role of social support and empowerment in the amelioration of work stressors among Australian nurses. It has been well documented in the health care literature that the problem of work-related stress could have serious and negative consequences for nurse performance and the provision of quality patient care, as well as the recruitment and retention of nurses (Creegan, Duffield & Forrester 2003; Schroeder & Worrall-Carter 2002; Fitzgerald 2002; Santamaria 2000; Johnstone 1999). Our results clearly demonstrate that the presence of social support structures, namely through supervisors and work colleagues, is associated negatively with all of the main work stressors. These results are consistent with and build on previous nursing studies (eg, Schroeder & Worrall-Carter 2002; Healy & McKay 1999). With respect to empowerment, however, it is clear that the relationships between the four cognitions of empowerment and occupational stressors are complex. Firstly, psychological

empowerment of nurses was not associated with stress derived from work overload. Secondly, the finding that empowerment (impact and competence) was negatively associated with nurse job stress is consistent with previous overseas studies in the nursing literature (eg, Laschinger, Finegan & Shamian 2001) and the management literature (eg, Savery & Luks 2001). Thirdly, not all components of empowerment were invoked in the amelioration of the nurse work stressors. These results have a number of important implications for nurses and all levels of nurse and hospital management. These implications are discussed below.

With respect to social support, hospital management may choose to implement strategies aimed at the health and wellbeing of nursing staff by promoting supervisor and co-worker communication and support. An important initial step may require hospital leaders to conduct a comprehensive self-assessment, identifying problem areas in communication, hierarchy and leadership (Ramano 2002). An obvious means of facilitating social support is the provision of forums for communication between co-workers and between workers and their supervisors. For example, weekly ward meetings may be scheduled to discuss work-related issues. Further, the formal 'handover' between shifts, used to exchange patient-related information, could be extended to include a five to ten minute informal

Variable	Model 1: Composite job stress	Model 2: Work control	Model 3: Role conflict/ ambiguity	Model 4: Resource inadequacy	Model 5: Work overload
Supervisor support	-0.05 [‡]	-0.30^{\ddagger}	-0.12 [‡]	-0.06^{\dagger}	-0.12 [†]
Co-worker support	-0.99^{\ddagger}	-0.37^{\ddagger}	-0.27^{\ddagger}	-0.16^{\dagger}	-0.26^{\dagger}
Meaning	-0.28	-0.05	-0.10	-0.15	0.01
Impact	-0.40^{\ddagger}	-0.39^{\ddagger}	0.07	-0.07	0.04
Competence	-0.84^{\ddagger}	-0.17	-0.16	-0.41^{\ddagger}	-0.11
Self-determination	0.13	0.11	-0.19^{\dagger}	0.18^{\dagger}	0.04
\mathbb{R}^2	0.40	0.44	0.26	0.22	0.06
F	17.78 [‡]	21.13 [‡]	9.69 [‡]	7.99^{\ddagger}	2.58 [†]

handover between relevant staff to reduce conflict/ambiguity over patient care issues.

Developing and harnessing relationships is an essential part of nursing, and teamwork is one such relationship (Schroeder & Worrall-Carter 2002). A teamwork model may be an important vehicle for building social support networks both between nurses themselves and between management and nurses. Contemporary nursing literature underscores the importance of developing nurse managers' team building, coaching and leadership skills to facilitate greater mutual respect and open communication at the ward level (Stordeur, D'hoore & Vandenberghe 2000). The implementation of formal mentoring programs, too, may provide a means whereby support networks may develop between less experienced and more experienced nurses. Indeed, Schroeder and Worrall-Carter (2002) found that mentoring was an invaluable resource, providing nurses with pertinent work-related feedback and emotional support in the workplace.

Socialisation procedures at the ward level could also be reviewed to include programs/strategies that assist new nursing staff to feel part of a supportive, collaborative network of nurses. Socialisation procedures could be extended to include the development of informal social groups outside of work hours. Nurses often feel the need to 'debrief' after a difficult working day, and the support offered by co-workers in a more informal setting may go some way to alleviating feelings of work stress. Further, nurse management should exercise understanding and patience where co-workers engage in informal workplace discussions because of its possible stress-reducing effect. An important component of improving social support at the workplace level rests on the provision of management development for nurse unit managers and directors of nursing in the specific areas of mentoring, leadership style, team building, interpersonal communication and conflict resolution (Stordeur, D'hoore & Vandenberghe 2001). Gaining access to courses, seminars, workshops and conferences is an important way of developing these skills.

Turning to empowerment, our empirical results support a negative association between empowerment and job stress. Further analysis was undertaken to examine the components of job stress affected by empowerment. This analysis revealed the following:

- For this sample of Australian nurses, increased psychological empowerment (impact) was associated with reducing job stress derived from lack of control over work tasks. In other words, empowered nurses probably possess greater decision-making discretion and voice within the work context, contributing to a less stressful environment.
- It has been argued that while increased empowerment may result in disagreements and challenges to authority (perhaps leading to greater role conflict/ambiguity), ultimately organisational members benefit because they become active partners in solving organisational problems (Laschinger & Havens 1997). This appears to be the case for this sample of Australian nurses where increased psychological empowerment (self determination) was associated with reduced role conflict/ambiguity.
- Increased empowerment (competence and self determination) was negatively associated with resource inadequacy, particularly the feeling of being underqualified for the job. Essentially, those nurses who feel confident and competent in their jobs (possibly through appropriate experience and training/development) experience less stress.
- Empowerment was not associated with work overload.

Hospital management may therefore need to consider the implementation of a range of empowerment strategies to manage nurse work stress. Developing human resource management strategies that cultivate a sense of meaning would be particularly beneficial. Management might consider the provision of greater feedback to nurses concerning organisational and patient wellbeing, unit and individual performance to promote greater understanding of how nurses impact patients and the hospital as a whole. That is, nurses need to be made aware of how they fit into the hospital environment, that they are vital for accomplishing the hospital's goals, and should not feel

lost in the hospital's hierarchy. Conger (1989) also suggests that rewards and encouragement for exceptional achievement should be provided in visible and personal ways to increase employees' (in this case nurses') sense of belonging to the organisation (hospital) and being a valued contributor. Developing a sense of competence and confidence through ongoing training and development may be an important way to reduce stress derived from feeling underqualified. Further, participating in ongoing education, reading nursing journals, and/or joining professional associations enhances nurses' ability to perform in challenging situations (Aiken, Smith & Lake 1994). Formal mentoring might also play a role here so that more experienced nurses can transmit their skills, knowledge and abilities to less confident nurses. Indeed, the importance of mentoring has been suggested by the Nurse Recruitment and Retention Committee Final Report (Victorian Government Department of Human Services 2001). Self-determination can be enhanced by increasing decision latitude over nursing practices and tasks. Thus, encouraging greater participation in important work-related decisions, particularly participation in setting performance targets, is vital to ameliorating stress derived from work control and role conflict/ambiguity. Finally, it has been suggested that nurses should be provided with far more visible roles in governance (Ramano 2002).

Although the recommendations given may be important measures to manage nurse stressors, these are not without limitations and practical barriers. The major barriers according to Stanton, Bartram and Harbridge (2004) are the perpetuation of inadequate management structures as well as inadequate government funding. Until recently, little attention has been given to human resource management approaches in health care (Saltman, Figueras and Sakellarides 1998). This lack of focus on people management is surprising considering that the health care industry is labour intensive, highly educated and accounts for a large proportion of total labour costs. Clearly there is a role for further management development in this sector as well as informing and lobbying government on the need for additional health care funds

There are many opportunities for further research in this field. For example, further research within a hospital setting is required to explore other social support mechanisms (eg, friends and partners) and their impact on occupational stressors. Further research would also be useful to better understand the impact of social support structures and empowerment schemes on other key outcome variables, such as nursing absenteeism, retention rates and the quality of patient care. An examination of the role of effective nurse mentoring programs on key outcome variables, particularly work-related stress, may provide useful outcomes for both academics and practitioners. Oualitative research should also be conducted within a hospital setting to better understand and develop appropriate social support and empowerment interventions.

In conclusion, hospital administrators and managers may find it productive to encourage and develop strong social support networks among nurse supervisors and co-workers and to implement organisation practices that empower nurses to ameliorate nurse job stress. Against a background of difficulties in recruiting and retaining nurses in the health care industry (Creegan, Duffield & Forrester 2003; Fitzgerald 2002) coupled with the crucial role nurses play in that industry, the development of management practices that reduce occupational stressors should be seen by administrators and managers as a fundamental part of hospital management.

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