Job characteristics, organizational conditions, and distress/well-being among Italian and Dutch nurses: A cross-national comparison

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ABSTRACT

Background: Among health care workers, nursing has been identified as particularly stressful. Several studies have shown cross-national differences in nurses' levels of occupational stress and burnout.
Objectives: The purpose of the study was to compare job characteristics, organizational conditions, and strain reactions in Italian ($N = 609$) and Dutch ($N = 873$) nurses. It was also examined how and to what extent various job characteristics and organizational conditions explain occupational and general strain.
Design: The study was a cross-sectional questionnaire survey.
Method: Based on the Job Demand-Control-Support Model and the Tripod accident causation model, respectively job characteristics and organizational conditions were assessed as independent variables. Strain was operationalized in terms of job satisfaction, burnout, and psychosomatic complaints.
Results: Italian nurses perceived their job characteristics, organizational conditions, and well-being as more unfavourable than their Dutch colleagues. Hierarchical regression analyses showed that high job demands, low skill discretion, and low social support from supervisor were the most consistent predictors of occupational and general strain across samples. Organizational conditions added significantly to the prediction of job satisfaction and burnout. Furthermore, lack of personnel was a stronger predictor of burnout in the Italian nurses than in the Dutch nurses.
Conclusions: The study provides cross-national confirmation of the impact of job characteristics and organizational conditions on nurses' well-being. Differences in job characteristics partially explain the observed cross-national differences in distress/well-being. Furthermore, some evidence for crossnational differential effects of job characteristics and organizational conditions on well-being was found.

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What is already known about the topic?

- Nursing has been identified as particularly stressful and highly susceptible to burnout.

- Cross national differences have been observed in nurses' level of occupational stress and burnout.
- The Job Demand-Control-Social Support (JDCS) model is useful to guide research on stress and burnout.

What this paper adds

- Italian nurses perceive their job characteristics, organizational conditions, and well-being as less favourable than their Dutch colleagues. Differences in job characteristics

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partially explain the observed cross-national differences in distress/well-being.

- For the Italian and Dutch nurses, demands, control, and social support are consistent predictors of distress/well-being. Furthermore, organizational conditions add to the prediction of job satisfaction and burnout.
- Lack of personnel resources has a stronger effect on Italian nurses' than on Dutch nurses' burnout.

1. Introduction

Health care workers are currently facing a large number of new challenges, resulting from increased workloads, on top of occupational health risks such as infectious disease, confrontation with death and suffering, poor communication and social support, shift work, and emotional demands of patients and families (Firth-Cozens, 2001; Pisanti, 2007). Among health care workers, nursing is thought to be the most stressful profession. In addition, studies indicate that mortality rates, suicide, stress related disease, burnout and psychiatric and physical illness are more prevalent among nurses than among the general population (Firth-Cozens, 2001; Tummers et al., 2002). A cross national European study indicates that nurses report high levels of occupational stress and burnout, but that there are important differences among the countries (Van der Schoot et al., 2003).

The present study aims to examine whether nurses' job conditions and well-being vary depending on the health care context. To that purpose nurses working in academic hospitals in Italy and the Netherlands are compared in terms of job characteristics and organizational conditions, as well as job-related and general well-being outcomes.

A second aim is to examine how and to which extent job characteristics and organizational conditions explain nurses' well-being. Job characteristics are defined by the Job Demand-Control-Support Model (Karasek and Theorell, 1990), and organizational conditions by the Tripod model (Wagenaar et al., 1990, 1994).

1.1. Cross-national differences in job conditions

Existing studies indicate that nursing is a stressful occupation, but that there are important cross national differences in terms of job demands and control over these demands, as well as in reported job stress and burnout (Gil-Monte and Schaufeli, 1992; Schaufeli and Janczur, 1994).

Italian and Dutch nurses work in very different contexts. The Italian health care context is characterized by one of the lowest nurse per capita ratios in Europe: 6 nurses per 1000 inhabitants. In comparison, the Dutch healthcare system has one of the highest ratios: 9 nurses per 1000 inhabitants (European Observatory on Health Care Systems, 2001; Salvage and Heijnen, 1997). Furthermore, the annual salary of an Italian nurse is equivalent to US \$12.800, whereas in the Netherlands, the starting salary of a general nurse is equivalent to US \$18.000 a year (Salvage and Heijnen, 1997). Furthermore, nursing is considered traditionally in Italy as a low-status profession (Prandstraller, 1995) while in the Netherlands it is

recognized as an independent profession (Schaufeli and Janczur, 1994). In addition, the level of training and the opportunity for specialized training is at average higher in the Netherlands than in Italy.

Hypothesis 1. On the basis of these cross national differences in nurse per capita ratio, salaries, professional status and training, we expect that Dutch nurses will have more favourable scores on job characteristics, organizational variables, and general and occupational distress/well being indicators than their Italian counterparts.

1.2. The Job Demand-Control-Social Support Model (JDCS)

Karasek and Theorell (JDCS Model; 1990) posit that work related well-being is predicted by three crucial psychosocial dimensions of the workplace: job demands, job control (skill discretion and decision authority), and social support from colleagues and supervisor. On the basis of this model, high job demands, low control and low support have been hypothesized to additively predict high stress reactions.

Studies conducted among nurses and health care workers have shown that job demands are related to emotional exhaustion (ter Doest et al., 2006), anxiety (Jeurissen and Nyklíček, 2001), depression (Jeurissen and Nyklíček, 2001) and low job satisfaction (ter Doest et al., 2006). In contrast, job control is generally found to be beneficial for nurses' well being and job satisfaction (Akerboom and Maes, 2006; Bakker et al., 2005; ter Doest et al., 2006), and is negatively associated with psychological distress and emotional exhaustion (Bakker et al., 2005; Jeurissen and Nyklíček, 2001). Similarly, social support has been negatively associated with emotional exhaustion and distress (Proost et al., 2004; Van den Berg et al., 2006), and positively related with well-being and job satisfaction (Van den Berg et al., 2006).

Hypothesis 2. Based on this theoretical background and empirical findings, we expect that job demands, job control and social support will be associated with nurses' distress, in the sense that high demands, low control, and low social support are related to higher psychological distress and lower well being.

In many studies the JDCS constructs explain an important but limited amount of the variance in the outcome measures. One possible reason is that the model neglects the impact of the work *organization* on employee health and well-being (Akerboom and Maes, 2006; Tummers et al., 2002).

1.3. Organizational conditions

The Tripod accident causation model (Wagenaar et al., 1990, 1994) focuses on aspects of inadequate organizational functioning in the chain of events leading to unsafe acts. More specifically, it posits that unsafe acts are not random events, but are elicited by psychological precursors (e.g., attitudes, expectations, motives, emotional worry). These psychological precursors, in turn, are caused by the latent failures, namely dysfunctional aspects of the organizational