Psychosocial factors and economic recession: the Stormont Study

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The subheadings in the Methods section of this paper were removed during the editing process, which made parts of the section incomprehensible. The complete Methods section is given below. The editor and publishers would like to apologise for this error and for any confusion caused.

Methods

Participants were employees of the NICS. The research was commissioned and ethical approval was granted by the NICS Workplace Health Committee as part of the Stormont Study that is tracking a large cohort of employees through their career with the NICS and beyond.

To assess as many employees as possible efficiently, a quantitative survey was developed. At initial assessment (May 2005), surveys were distributed to all NICS employees. This took place prior to the appearance of initial signs of impending economic crisis. The first warning sign of the UK’s 2009 economic recession is generally acknowledged to be the bankruptcy protection application filed in the USA by New Century Financial in April 2007.

Follow-up data collection occurred in the first quarter of 2009 during the official period of recession. The commonly accepted definition of an economic recession and that used by the UK government is that of two consecutive quarters of negative economic growth. On the basis of this definition, the UK economy entered recession in January 2009 and emerged in January 2010. Surveys were distributed to employees from a random selection of NICS departments.

A series of interviews was conducted with senior staff to establish that no substantive organizational events, development or change had occurred in the period between the two waves of data collection that might otherwise explain differences found in the variables at the two data collection points.

All variables were measured using a single self-report anonymous questionnaire. In addition to basic demographic information, data were collected on the following.

Psychosocial hazard exposure was assessed using the 35-item Management Standards Indicator Tool [10]. This assessed exposure to seven dimensions of the psychosocial work environment. Responses are given on a 5-point scale: 1 (never), 2 (seldom), 3 (sometimes), 4 (often) and 5 (always). Low scores are indicative of high (and potentially harmful) exposures. An example of an item is 'I am clear what is expected of me at work'. The seven sections address job demands (eight items; initial assessment $\alpha = 0.86$; follow-up assessment $\alpha = 0.88$), job control (six items; initial assessment $\alpha = 0.80$; follow-up assessment $\alpha = 0.84$), managerial support (five items; initial assessment $\alpha = 0.87$; follow-up assessment $\alpha = 0.89$), peer support (four items; initial assessment $\alpha = 0.80$; follow-up assessment $\alpha = 0.83$), relationships (four items; initial assessment $\alpha = 0.78$; follow-up assessment $\alpha = 0.82$), role (five items; initial assessment $\alpha = 0.82$; follow-up assessment $\alpha = 0.85$) and change (three items; initial assessment $\alpha = 0.80$; follow-up assessment $\alpha = 0.81$). The Cronbach’s alpha values provide an indication of the internal consistency (reliability) of each section of the questionnaire, i.e. the extent to which the items within each section correlate with the others in that section, and demonstrate that reliability was consistent with that found in other large-scale studies which have used the Management Standards Indicator Tool [11–14].

Perceived work-related stress was measured using a single-item ‘How stressful do you find your job?’ Responses were given on a five-point scale, from ‘not at all stressful’ (1) to ‘extremely stressful’ (5). Single-item measures offer an expedient approach to data collection in the organizational context [15]. The approach is also useful where the research objective is to obtain a ‘snapshot’ of a topic rather than detailed diagnostic information. Although single-item measures of psychological constructs are sometimes assumed to have low reliability and validity, if the meaning of the construct is clear to the respondent, a single-item approach may be adequate [16]. The attributes of single-item measures of work-related stress have been demonstrated in a number of studies in recent years [17–23], suggesting an effective and efficient alternative to the more complex case definitions typically employed by researchers [24].

Sickness absence attributed to work-related stress was measured using a single item: ‘In the last year how many
working days were you absent from work because of work-related stress?’

Bivariate correlations were performed to give some preliminary insight into relationships between the study variables. Differences in psychosocial hazard exposures, work-related stress and sickness absence attributed to work-related stress between initial and follow-up assessment were examined using unrelated t-tests. Data were screened prior to analysis for the accuracy of scores, missing data, outliers and violations of the assumptions of the analysis. Statistical analyses were undertaken using PASW Statistics 18 [25].