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**Measuring Stressors and Strain in Academic Staff: Comparing the Fit of the Job-Demand-Control Support and Job Demand Resources Models.**

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This study compares the performance of two widely used models of job-related stress in predicting strain in UK academics. The job-demand control support (JDCS: Karasek, 1979; Johnson, Hall & Theorell, 1989) and the job demand-resources model (JDR: Demerouti et al., 2001) both attempt to account for the potential impact of job demands on employees. Both models have been tested extensively across a range of professional groups with varied results. This study aims to investigate whether the JDCS or the JDR model best fits the experience of academic staff working in UK Universities. The aim is to inform the development of interventions tailored to academic contexts.

A questionnaire was electronically distributed to all active members of the UK University and College Union (UCU) in 2012. 12,635 full-time academic staff (55% female) completed the survey. The HSE Management Standards Indicator Tool (Mackay et al., 2004) was utilised to assess job-related psychosocial hazards (i.e. demands, control, support from colleagues and managers, role, relationships and change. Perceived stress was measured using an index of three questions designed for the study. Structural equation modelling was utilised. An alternative models approach was deployed to explore which of the two models best fit the data. Initial hierarchical multiple regression analysis suggests that the models explain a similar proportion of variance in perceived strain (i.e. JDC(S) = 57% and the HDR = 59%). Strong main effects were found in each model, most notably for demands and manager support in the JDC(S) and demands and relationships for the JDR. Two-way interaction effects were found in the JDR between demands and relationships, role and peer support. For the JDC(S), two-way interactions between demands and both peer and manager support were found but there were no three-way interaction effects.

The findings provide insight into the work-related psychosocial hazards that are the strongest predictors of perceived stress in a large, representative sample of UK academics. Supporting the finding that academic employees experience comparatively high levels of control (Kinman, Wray & Court, 2012), the findings suggest that interventions which aim to enhance control would not be fruitful. Due to its comprehensiveness, it is argued that the JDR model has more scope to inform interventions tailored to the working environment, particularly with regard to relationships and role.