

He said, she said: A structural equation model exploration of sex differences in work, social, and strain contributions to coronary heart disease risk factors

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In a cross sectional sample of 541 employees, the Job Demand Control Support and Effort Reward Imbalance job stress models were amalgamated and expanded to include modifiable and non-modifiable factors related to coronary heart disease (CHD). Sex differences were explored in a hypothesized model. Using structural equation modeling, the constructs of job demand, job control, job support, job reward, and non-work social ties (NWST) were used to examine how these related to biopsychosocial strain (BPSS) and how BPSS related to lifestyle behavior risk (LBR). LBR, BPSS, age, and family history of premature heart disease (FHHD) were explored in relation to seven CHD risk factors: (a) blood pressure (BP), (b) HDL cholesterol, (c) LDL cholesterol, (d) triglycerides, (e) fasting glucose (FG), (f) obesity, and (g) cigarette smoking. Mean sex differences were found such that generally women had a more positive CHD profile. Positive perceptions of job demand, job reward, and NWST predicted positive perceptions of BPSS for men. Positive perceptions of job demand, job control, job support, and NWST, but not job reward, predicted positive perceptions of BPSS for women. BPSS displayed limited relationships with the CHD risk factors. On the other hand, LBR predicted BP, LDL, triglycerides, obesity, and smoking amount for men and triglycerides, obesity, and smoking amount for women. Age and FHHD were also useful in predicting many of the CHD risk factors. Chi-square difference tests on the hypothesized paths determined that sex differences in the model were minor. Implications for practice are discussed.

Biography

Pat completed her Ph.D. in Industrial Organization Psychology from the University of Calgary. She is a partner in Calgary Psychology Group Inc./ Janus Associates, a large psychological practice that provides service to organizations and individuals across Canada. She collaborates with a medical company which provides employee and executive health assessments. They have collected data over 15 years. This work has been published in top tier journals and presented at international conferences. Pat sits on several international committees examining various workplace stressors and presents frequently at workplace stress conferences.

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