

# MODELING THE JOINT EFFECT OF DEPRESSION AND CHRONIC SOMATIC CONDITIONS ON DISABILITY

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Evidence exists that major depression interacts with physical illness to amplify the disability associated with many medical conditions. The objective of this study was to determine whether there is a (negative) synergistic effect of depression and chronic conditions on functional disability in a community sample. We used data from the Canadian Community and Health Survey (CCHS 2.1) which was a nationally representative survey conducted in 2003 by Statistics Canada. Additive and multiplicative models for the joint effect of depression and chronic conditions on functional disability were explored using logistic regression and negative binomial regression models. Synergistic indices were compared using relative risks and 95% confidence intervals.

Results suggested that there was evidence of significant departure from the additive model in the multiplicative direction for most of the chronic conditions.

Psychiatric-somatic co-morbidity should be evaluated carefully when evaluating disability in community samples. Sophisticated statistical models are needed to analyze synergistic effects of psychiatric and somatic predictors.

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