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# P2-529: WHICH LIFE EVENT DOMAINS ARE ASSOCIATED WITH DEMENTIA RISK?

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### Background

Individual and total negative life events have been correlated with dementia risk (Gerritsen et al., 2017; Persson and Skoog, 1996; Norton et al., 2009), although null results have also been found (Sundstrom et al., 2014). Research examining whether positive life events lower dementia risk is also inconclusive (Sundstrom et al., 2014; Sundstrom et al., 2014). Life events measures encompass the intersection of modifiable risk factors related to social engagement, socioeconomic conditions, and physical health conditions considered to raise risk of dementia (Livingston et al., 2017). Yet, the literature on whether and how negative and positive life events affect dementia risk remain understudied. In the current study, we investigated whether a population of older Swedish adults with dementia experienced more negative life events and fewer positive life events than adults without dementia. We hypothesized that adults who develop dementia would experience more negative life events but not fewer positive life events than adults who did not develop dementia.

#### Methods

We analyzed 1,742 individuals (57.81% female) from the first three waves of the Swedish Adoption/Twin Study of Aging (SATSA) to investigate whether different domains of life events were correlated with dementia risk (Finkel and Pedersen, 2004). Exploratory factor analysis suggested six life event domains (multidomain loss, negative life events regarding children, illness of self, family strife, negative life events regarding spouse, and positive life events) which were subsequently validated using confirmatory factor analysis. Dementia status was determined through screening and clinical evaluation, as well as registry-linked follow-up (Gatz et al., 1997).

#### Results

People who eventually develop dementia scored higher in multidomain loss, illness of self, and negative life events regarding spouse (all p < .001). The effect size was small to medium. People who eventually develop dementia did not have experience higher scores in family strife, positive life events, and negative life events regarding children.

## Conclusions

Current findings suggest that older adults diagnosed with dementia are more likely to experience more negative life events than adults who remain cognitively intact. Future research should investigate potential biological and social mechanisms underlying the association between negative life events and dementia risk.