

# Request #: 465 - PSY - Dissertation

## Risk Factors for Early and Late Onset Depression and Subsequent Risk for Alzheimer's Disease and Related Dementias in an Older Adult Population

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### Background

Alzheimer's Disease and related dementias (ADRD) and depression are two conditions that may result in significant functional impairment and are widespread in prevalence, globally affecting 35.6 million and 264 million people, respectively. There is evidence for a connection between ADRD and depression in longitudinal studies, such that those with a history depression are more likely to develop ADRD in late life. However, extant literature has yet to examine genetic and psychosocial factors that contribute to earlier or later onset of depression and how these factors in turn may confer risk for ADRD.

### Sample

Data will be drawn from the Cache County Study on Memory in Aging (n=5092). Data from these participants are further linked to records in the Utah Public Health Database and Medicare Claims

### Hypothesis

- 1) Are acutely and chronically stressful life events differentially related to early life onset depression (EOD) and late life onset depression (LOD)? We hypothesize that acutely stressful life events will be related to EOD and LOD, though a larger association will exist for EOD; chronic life stressors will be related to EOD and LOD, though a larger association will exist for LOD.
- 2) Are there differences in the occurrence of specific Brain Derived Neurotrophic Factor (BDNF)-related genotypes associated with early and late onset depression? Do these genotypes moderate the association of stressful life events with early and late onset depression? We hypothesize that BDNF-related genotypes will be associated with EOD and LOD. Further, we hypothesize that BDNF-related genotypes will moderate the association between acute life stressors and the association between chronic life stressors and LOD.
- 3) Are EOD and LOD associated with differences in risk for ADRD? We hypothesize that those with EOD will display a greater risk for ADRD in later life.
- 4) Do vascular risk factors and conditions modify the relationship between early- and late-onset depression and risk for ADRD? We hypothesize that Vascular health will moderate the relationship between both EOD, LOD and ADRD risk.

### Progress

Received De-identified data sets, wrote a statistics script. Checked frequencies on demographic variables.

### Request

Guidance in creating and cleaning the variables from the CCSMA that I will use for my analyses. Being efficient and accurate in building my database in SPSS and what to expect when I run analyses for the

UPDB on their private network.

### **Timeline**

I would like to have all analyses complete by the end of July at the latest. My goal is to be writing up results for Paper 1 by the end of June.