Moderators of Depressive Symptoms for Older Adults with Dual Sensory Loss

Funded by the National Institute on Aging
(Michele C. McDonnell, Ph.D, P.I.) mmec10@msstate.edu

Project Overview

A much larger proportion of older persons with dual sensory loss experience syndromal or subsyndromal depression compared to the general population. As depression is associated with reduced quality of life and the incidence of dual sensory loss is rising with the increasing life span in the United States, this presents an important public health concern in this country. The population of older persons who acquire dual sensory loss later in life has, to date, received little attention by researchers. For example, currently nothing is known about the longitudinal effects of acquiring dual sensory loss on depression. Also, we do not know why many older people with dual sensory loss experience depression or its symptoms, while many others do not experience negative effects in this area.

Determining the reason for these differences is important. Of particular importance is detecting reasons that are adaptable (i.e., ones that can be changed by the individual), as these factors may give individuals some ability to control their own outcomes. If factors are identified that can reduce the negative effect of dual sensory loss on depression, interventions could be developed to directly assess the ability of changes in these areas to decrease the psychological dysfunction associated with dual sensory loss. A first step in this direction is identifying adaptable factors that can reduce the negative effect of dual sensory loss on depression.

Given the lack of research with this population in this area, I will first investigate how acquiring a dual sensory loss affects symptoms of depression over time. After determining this, the ability of adaptable factors to moderate the relationship will be investigated. Therefore, the primary goals of this project are to:

1. Determine the effects over time of acquiring a dual sensory loss on subsyndromal depression.

2. Determine whether identified adaptable factors can moderate the negative effect of dual sensory loss on subsyndromal depression.

Project Summary

Dual sensory loss (i.e., combined hearing and vision loss) is a condition that affects a substantial portion of older adults in the United States. Several negative outcomes have been associated with this condition, including psychological dysfunction, particularly the increased experience of syndromal or subsyndromal depression. Because of the multiple adverse effects associated with depression, the experience of this condition among persons with dual sensory loss (DSL) warrants attention. The primary aims of this project are to: 1) Determine the effects over time of acquiring a DSL on subsyndromal
depression, and 2) Determine whether identified adaptable factors can moderate the negative effect of DSL on subsyndromal depression.

The factors that will be tested as to their potential moderating effect are physical status and participation in productive activities, each of which will be measured with three variables. Health and Retirement Study (HRS) and Aging and Health Dynamics study (AHEAD) data (from years 1993, 1994, 1995, 1996, 1998, 2000, 2002, and 2004) will used to conduct the research. The sample will include persons who self-report development of a DSL during the course of data collection and a comparison group of persons without sensory loss matched on age (N=3,024). Hierarchical linear modeling will be used to analyze the data. Individual growth curve models will determine (a) the average rate of change in depressive symptoms, (b) the individual variability in change in depressive symptoms over time, and (c) the effects of physical status and participation in productive activities on trajectories of depressive symptoms for this population.

This research will inform professionals in the sensory loss fields and general service-providers (e.g., doctors, social workers, psychologists) about the longitudinal relationship between DSL and depression, about which nothing is currently known. Further, it will determine whether specific adaptable factors related to physical status and productive activities are associated with lower levels of subsyndromal depression for older adults who develop DSL. Identification of adaptable factors that have the ability to reduce or prevent this negative outcome is an important first step in developing interventions that can directly assess the ability of changes in these factors to decrease the psychological dysfunction associated with DSL.

Publications: