depressive symptoms. Our findings suggest the majority of residents experience terminal change, with the exception of those at already high levels of impairment. Furthermore, late-life cognitive change is related to functional and mental health.

IS COGNITIVE DECLINE BEFORE DEATH IN THE OLDEST OLD A UNIVERSAL PHENOMENON?

A. Robitaille[1], D. Cadar, PhD[2], A. Koval, PhD[3], C. Jagger, PhD[4], B. Johansson, PhD[5], S. Hofer, PhD[6], A. Piccinin, PhD[7], G. Muniz-Terrera, PhD[8], *1. Department of Psychology, Université du Québec à Montréal, Montreal, Quebec, Canada, 2. Department of Epidemiology and Public Health, University College London, London, UK, 3. Department of Psychology, University of Victoria, Victoria, BC, Canada, 4. Institute of Health and Society, Newcastle University, Newcastle upon Tyne, UK, 5. Department of Psychology, University of Gothenburg, Gothenburg, Sweden, 6. Department of Psychology, University of Victoria, Victoria, BC, Canada, 7. Department of Psychology, University of Victoria, Victoria, BC, Canada, 8. Centre for Dementia Prevention, University of Edinburgh, Edinburgh, UK*

We investigated the heterogeneity in end of life cognitive decline in two European longitudinal studies of the oldest old: the OCTO-Twin and the Newcastle 85+ Study. Using a coordinated analytical approach, we identified unobserved groups of individuals with similar trajectories of cognitive decline at the end of life by fitting Tobit Growth Mixture Models to Mini-Mental State Examination scores. In both studies, the current analyses consistently identified two groups of individuals whose cognitive decline at the end of life were distinct: one group did not exhibit an ostensible rate of decline, another group experienced steep decline in measures of global cognition within each study. In OCTO-Twin, accelerated decline was found in only one group. Our results showed heterogeneity in cognitive decline at the end of life in the oldest old across two different European countries and suggest that terminal decline is not necessarily a normative process.

TERMINAL DECLINE AS A GENERIC MODEL OF COGNITIVE AGING

V. Thorvaldsson, *University of Gothenburg, Gothenburg, Vastra Gotaland, Sweden*

Cognitive terminal decline (TD) refers to acceleration in an individual decline trajectory with an onset at some specific time (months, years) prior to death. Previous studies provide strong evidence of a large inter-individual differences in the onset of TD, in which some show an acceleration many years prior to death while others are never affected. In the present analysis we further evaluate the pros and cons of TD as a generic model of cognitive aging with the specific purpose to capture inter-individual difference in change trajectories. More specifically we provide examples of the potential role of cardio-vascular health-related variables derived from a representative population-based sample (the H70 study). The findings show superiority of the time-to-death time structure, in comparison to age-based or time-in-study, to account for inter-individual difference in the change trajectories, and that compromised vascular health in general is associated with earlier onset of TD.

REDUCING INTRAINDIVIDUAL VARIABILITY IN COGNITIVE SPEED VIA PRODUCTIVE ACTIVITY ENGAGEMENT: THE SYNAPSE PROJECT

A.A. M. Bielak[1], C. Brydges, PhD[2], D.C. Park, PhD[3], *1. Colorado State University, Fort Collins, Colorado, United States, 2. Colorado State University, Fort Collins, CO, USA, 3. The University of Texas at Dallas, Dallas, Texas, USA*

Intraindividual variability (IIV) in cognitive speed has the potential to be a sensitive outcome measure for evaluating cognitive improvement from lifestyle interventions. Using the Synapse Project (n = 181), a randomized controlled trial to improve cognitive ability, we evaluated if older adults who participated in productive engagement (i.e., active learning of quilting, digital photography, or both) showed a reduction in IIV compared to those in receptive engagement (i.e., using existing knowledge via social outings or rote cognitive tasks.). All participants completed their condition for 14 weeks. IIV was based on three versions of a RT flanker task. Complier average casual effect modeling was used with compliance set at 210 hours. The models indicated that compliers in the productive engagement groups did not show any significant change in their IIV. The results demonstrate that even an intensive activity intervention may not be sufficient to cause significant improvement in IIV.

SESSION 1465 (SYMPOSIUM)

OLDER TRAUMA-EXPOSED MALE AND FEMALE VIETNAM VETERANS: CLINICAL ISSUES AND INNOVATIONS

Chair: P. Bamonti, *VA Boston Healthcare System, Roslindale, Massachusetts*
Co-Chair: K. O'Malley, *VA Boston Healthcare System, Boston, Massachusetts*
Discussant: E.H. Davison, *VA Boston Healthcare System, VA National Center for PTSD, Boston University School of Medicine, Boston, Massachusetts*

As Vietnam Veterans age into older adulthood, the consequences of lifetime trauma exposure can manifest, including mental and physical health morbidities. Identification of risk and protective factors is needed for the development and tailoring of interventions to mitigate the impact of trauma on wellbeing. This symposium focuses on clinical issues and innovations relevant to research and clinical work with Vietnam Veterans. We begin with research examining risk factors and correlates of mental and physical health outcomes in Vietnam Veterans. First, we will present research examining risk associations linking traumatic stress exposures and mental health correlates with current health-related outcomes in Vietnam era women veterans. Next, we will present findings examining cognitive and other psychological factors related to positive and/or negative outcomes associated with past combat exposure in Vietnam era combat veterans. The program will then shift to innovative interventions for late life PTSD and stress reactions. Pre- and post-group data on veterans who participated in a Later-Adulthood Trauma Reengagement (LATR) group will be presented. The presenter will discuss the application of the LATR model in the treatment of late life PTSD symptomatology, and present program improvement recommendations based on the findings. Fourth, we