



DECEMBER 2022

GLOBAL AGING E-BRIEF

Newsletter from the Global Aging Community Initiative

REVES MEETING

The Global Aging and Community Initiative recently hosted the 33rd annual meeting of REVES (The International Network on Health Expectancy and the Disablement Process). There were two aspects to the meeting. On September 19-20, 2022, we held a workshop on “concepts and methods in health expectancy research.” The workshop was led by some of the world’s leading scholars in the area of health expectancy research. It was attended by 28 participants, including graduate students and junior faculty from across Canada and several international locations, as far afield as Nigeria. Funding from SSHRC allowed us to award nine bursaries for Canadian and international participants to attend the workshop. (continued pg. 3)



About 28 people attended the 2-day training workshop, "International Workshop on Health Expectancy: An Educational, Training and Networking Opportunity for Scholars," hosted in Halifax, Nova Scotia, Canada on September 19 & 20, 2022 at Dalhousie University.

This issue:

Project Update

PAGE 02

REVES continued & Selected Publications

PAGE 03

GACI Profile

PAGE 04

The Global Aging and Community Initiative (GACI) is a research organization at Mount Saint Vincent University (MSVU), located within the Nova Scotia Center on Aging. It is directed by Dr. Zachary Zimmer, a Tier I Canada Research Chair and Professor of Family Studies and Gerontology. The GACI aims to create knowledge on issues related to the quality of life of older persons worldwide through collaborative research across a broad global scientific community. GACI is currently working on a number of research projects focusing on the health and well-being of older persons in different areas around the world. We currently list 22 collaborators from eight countries.

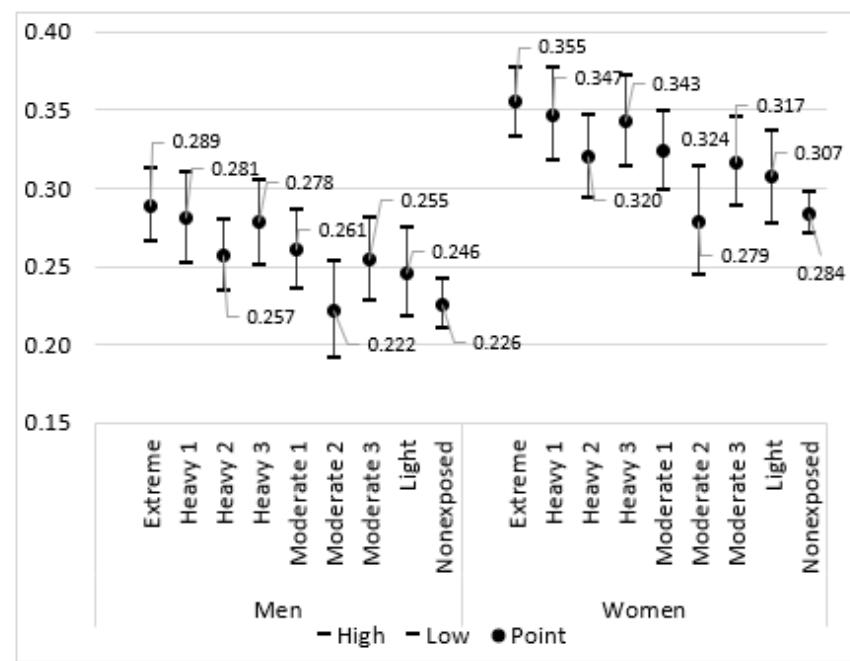
RESEARCH UPDATE

Early-life War Exposure and Later-life Frailty

The Vietnam Health and Aging Study (VHAS) seeks to understand the long-term impact of wartime trauma on health and aging. Wave 1 data collection was completed in 2018. Wave 2, which was delayed due to Covid-19, is just now being completed. In Wave 1, an international research team collected extensive data by survey, blood samples and other biomarker tests, from about 2,500 participants aged 60+ living in various districts in Northern Vietnam. For Wave 2, survivors are being revisited. We wait for Wave 2 data to be processed so that we can begin longitudinal analysis, but the research team has been busy analyzing Wave 1 data and have published several important research papers.

A recent issue of the *Journals of Gerontology: Social Sciences* published our article titled: "Early-Life War Exposure and Later-Life Frailty Among Older Adults in Vietnam: Does War Hasten Aging?". The publication received the Editor's Choice designation for the journal. Using Wave 1 VHAS data, the research reported in this publication assesses the nature and degree of association between exposure to potentially traumatic wartime experiences in early-life, such as living in a heavily bombed region or witnessing death firsthand, and later-life frailty.

The paper actually accomplishes two tasks. First, it generates a classification for wartime traumatic exposure using a statistical technique called Latent Class Analysis. This indicates that participants in VHAS can be separated into nine groups that have common wartime experiences. Those with the most extreme exposure tended to have had a variety of experiences during war in Vietnam, such as witnessing death firsthand, experiencing sleep disruptions, being displaced from home, having a shortage of food and/or water and living in a region with intense bombing. About 9% of older Vietnamese are classified in this group. Many others are classified into groups that tended to have other combinations of exposures, and some were relatively non-exposed.



Predicted values for Frailty Index scores across wartime exposure classes, showing point estimates and high/low 95% confidence interval bars. From Zimmer et al. 2022.

Second, it analyzes how the wartime exposure classification associates with frailty as measured by VHAS in 2018. The 'frailty index' runs from 0 to 1, with 0 indicating least and 1 most frail. The figure above, which is based on a complex multivariate modeling procedure, provides key results. For men, average frailty scores are .289 for those in the most extreme exposed group but just .226 for those in the non-exposed group. For women, the average frailty scores are .355 for the extremely exposed group and .284 for the non-exposed. These results clearly indicate that those more heavily exposed in early-life have higher degrees of frailty in later-life, suggesting that war trauma hastens aging.

* Zachary Zimmer, Kim Korinek, Yvette Young, Bussarawan Teerawichitchainan and Tran Khanh Toan. 2022. Early-Life War Exposure and Later-Life Frailty Among Older Adults in Vietnam: Does War Hasten Aging? *Journals of Gerontology: Social Sciences*, Vol. 77, No. 9, pp 1674-1685. <https://doi.org/10.1093/geronb/gbab190>.

REVES MEETING continued....

Immediately following the workshop, September 21-23, we held the REVES meeting, which was titled, "Advances in International Research on Health and Life Expectancy in the Covid-19 Era". There were about 60 participants from 15 countries, and 38 papers were presented over three days. Some presentation highlights were: "Gender Disparities in Healthy Aging: A Cross-National Comparison," by Venessa di Lego, University of Vienna, Austria; "The novocoronavirus pandemic impact on the mortality diversification by causes of death in Spain," by Julia Almeida Calazans, Universitat Autònoma de Barcelona, Spain; "Obesity, Dementia and Mortality Among Older Americans: New Insights from Heterogenous Body Mass Index Trajectories After Incident Dementia," by Yuan S. Zhang, University of North Carolina USA; "Recent trends in adult mortality by education in Europe: a comparative analysis," by Wilma J. Nusselder, Erasmus University, Netherlands; and "Validity of the Global Activity Limitation Indicator (GALI) in Developing Countries in Asia," by Yasuhiko Saito, Nihon University. The George Myers Lecture (keynote address) was given by Dr. Michael Wolfson of the University of Ottawa on "Healthy Life Expectancy: On the Co-evolution of Data, Methods, and Insights". The quality of the presentations for REVES was very high. This was the first in-person meeting of the REVES network in three years, with the last two being curtailed due to the Covid-19 pandemic. Next year's meeting will take place in Padua, Italy.



(Above) About 60 people participated in the 33rd REVES meeting, which took place in Halifax, Nova Scotia from September 21-23, 2022 at Dalhousie University.

(Below) As part of REVES the group enjoyed a traditional lobster dinner at The Waterfront Warehouse.

SELECTED PUBLICATIONS

- Zachary Zimmer, Kim Korinek, Yvette Young, Bussarawan Teerawichitchainan, Tran Khanh Toan. 2022. Early-life war exposure and later-life frailty among older adults in Vietnam: Does war hasten aging. *Journal of Gerontology: Social Sciences*. 77(9): 1674-1685. (Selected as the Editor's Choice Article for the issue.) [DOI: 10.1093/geronb/gbab190](https://doi.org/10.1093/geronb/gbab190).
- Chen, Vivian Yi-Ju, Kiwoong Park, Feinuo Sun, and Tse-Chuan Yang. In press. "Assessing COVID-19 risk with temporal indices and geographically weighted ordinal logistic regression in US counties." *PLoS ONE* 17(4): e0265673. doi: 10.1371/journal.pone.0265673
- "Changes in Health Expectancy for Older Adults in Japan: Results from Two Longitudinal Surveys," Yuka Minagawa and Yasuhiko Saito, *Gerontology*, forthcoming.
- Bennett HQ, Kingston A, Lourida I, Robinson L, Corner L, Brayne C, Matthews FE, Jagger C; Cognitive Function and Ageing Studies Collaboration. A comparison over 2 decades of disability-free life expectancy at age 65 years for those with long-term conditions in England: Analysis of the 2 longitudinal Cognitive Function and Ageing Studies. *PLoS Med*. 2022 Mar 15;19(3):e1003936. doi: 10.1371/journal.pmed.1003936. PMID: 35290368; PMCID: PMC8923437.
- Kingston A, Wittenberg R, Hu B, Jagger C. Projections of dependency and associated social care expenditure for the older population in England to 2038: effect of varying disability progression. *Age and Ageing* 2022 (in press).
- Norris, D., Smith-Evans, K., Cramm, H., & Tam-Seto, L. (in-press). A post-traumatic growth perspective on PTSD: The case of military veterans and their partners. *Military Behavioral Health*.

GACI SPOTLIGHT PROFILE

Feinuo Sun, GACI Post-Doctoral Fellow



The last year has witnessed tremendous progress in the research on chronic pain being undertaken at GACI, thanks in large part to the contributions of Dr. Feinuo Sun. Feinuo was hired as a post-doctoral fellow working on the “Demography of Chronic Pain” project, funded by the U.S. National Institutes of Health.

Her current research focuses on the social and environmental determinants of pain and pain-related outcomes. She is working on several papers with the study's lead investigators, Drs. Zachary Zimmer, Hanna Grol-Prokopczyk (Associate Professor, University at Buffalo) and Anna Zajacova (Associate Professor, Department of Sociology, Western University). Together they are trying to understand disparities in how people develop and live with pain across different population groups. For example, one analysis establishes transitions between pain and disability and examines how education impacts these transitions; another investigates pain disparities across rural and urban areas.

These projects build upon Feinuo's thesis dissertation, which was based on the geographical disparities of the opioid crisis, wherein she answered questions about one of the rooted contributors of the crisis: the rising prevalence of pain. “So little insight about pain and the role of pain in all areas concerning health issues, such as depression, disability, and opioid use need to be examined,” says Feinuo.

Feinuo plans to develop her research at the intersection areas of demography, rural sociology, and health studies, by contributing to theories and empirical studies about health inequalities at both the individual and ecological level.

“My undergraduate training as a major in engineering led me to be a quick learner of different research methods and tools that can be utilized to answer a variety of research questions,” says Feinuo.

Currently, Feinuo is getting to know the city of Halifax by spending her spare time enjoying restaurants, shopping, and sightseeing in her new city.

“The scarcity of pain research in the field of demography and sociology adds more exciting and inspiring experiences to the journey.”

-FEINUO SUN-