Editorial

Wave 2 of the National Social Life, Health, and Aging Project: An Overview

The National Social Life, Health, and Aging Project (NSHAP) is designed to provide new data to explore how social support and personal relationships are associated with the health and aging in a representative sample of older community-dwelling Americans. NSHAP now has completed two rounds of data collection. There were two important objectives for carrying out the second wave of data collection. First, given the dynamics of health and aging, it was critical that NSHAP allow for longitudinal analyses of health trajectories. Second, because NSHAP is explicitly designed to shed light on the role of social support and personal relationships, Wave 2 (W2) expanded its design to include partners. Underlying these two objectives, the W2 NSHAP data collection effort attempted to balance consistency for longitudinal analysis with allowance for innovative developments.

The articles in this special issue highlight W2 data and its potential value to a multidisciplinary research community. This special issue complements and expands on the previous special issue highlighting the Wave 1 (W1) data. The articles were peer-reviewed in accordance with the usual procedures of this journal. We were the guest editors of this special issue and we were happy to see the substantial scientific output of this new survey wave, which has many unique dimensions that distinguish it from other American national surveys, including those supported by the National Institute on Aging (such as this one) and those supported by other sources.

Contents of the Issue

As noted above, this special issue covers findings from W2 of NSHAP, but several papers also contain data from W1, in order to place the findings in longitudinal context. There are 22 articles that describe, similar to the special issue covering the first wave, the sample design, the measures, methodological elaborations, and basic descriptive findings in the various domains of the survey. In addition, they clearly lay out consistencies between W1 and W2 which enable longitudinal analysis, and they present measures that are new and improved in W2. Recommendations and suggestions about using the data also provide guidance for the research community.

The first four articles in the issue provide an overview of W2 study design and methods. Jaszczak and colleagues report that the second wave of data collection for NSHAP resulted in approximately 3,400 in-person interviews, representing an unconditional response rate of 74%, only 2% points below W1 according to O’Muircheartaigh, English, Pedlow, and Kwok. In addition to re-interviewing W1 respondents, cohabitating romantic partners were also interviewed, both augmenting the W2 sample size, and allowing for a better understanding of the impact of marital and romantic relationships on health. Noninterviewed respondents from W1 were sought for personal interviewing, which enhanced the representativeness of the W2 sample. O’Muircheartaigh and colleagues provide recommendations and information about incorporating weights in all NSHAP analyses. In addition, Hawkley, Kocherginsky, Wong, Kim, and Cagney provide information about the prevalence and suggested treatments to deal with the different kinds of missing data in W2.

Data collection protocols remained similar in W2, including a 2-h, in-person interview, biomeasure collection, and a “leave–behind” questionnaire. A proxy questionnaire/exit interview was added in W2 to collect data, via proxy, about respondents who were too ill to be interviewed or who were deceased. O’Doherty and colleagues report on the collection of biomeasures, which was expanded from 11 in W1 to 40 in W2, based on the most prevalent disease states, aging conditions, and other health issues identified in W1. For example, C-reactive protein (CRP) was collected in both W1 and W2, but in W2, proinflammatory cytokines were added because of CRP’s association with common diseases found in W1.

Following the articles about study design and survey methods are four articles covering social measures in W2. Cornwell and Cagney open this series of papers by introducing the new measures of neighborhood conditions and neighborhood social context. These measures will enable examination of associations between neighborhood context and health among older adults. Cornwell and Cagney report that neighborhood conditions and social context vary across sociodemographic groups, possibly contributing to health and well-being disparities. They also report gender differences in how neighborhood context is experienced and evaluated. Interestingly, women participants perceived their neighborhoods to be both more socially cohesive, and also more dangerous. In their article about married and partnered couples, Kim and Waite introduce scales on shared activity and relationship quality. W2 of NSHAP provides detailed information about 2,487 respondents with spouses or romantic partners and 1,900 members of 950 cohabiting dyads in which both partners were interviewed. They explore the two-factor structure of the relationship quality...
scale and the one-factor structure of the shared activity scale. Their analysis finds that partnered men report both higher positive and higher negative relationship quality. Moving beyond dyadic relationships, Cornwell, Schumm, Laumann, Kim, and Kim look at respondents’ social networks, focusing on change between W1 and W2 based on respondents’ matching of network rosters between waves. They examine network growth and shrinkage from W1 to W2, finding that African Americans and individuals with low socioeconomic status had higher levels of confidant network shrinkage than whites and college educated respondents. Finally, Galinsky, McClintock, and Waite describe new W2 sexual measures that have never been collected in a nationally representative sample. These include measures of sexual interest and behavior, the context of sexual experience, and the frequency and appeal of physical contact. These new measures enable better characterization of sexual motivation for older adults and a better understanding of how the context of sexual experience and the nonsexual aspects of physical intimacy correlate with behavior, satisfaction, and problems. Authors compare the distribution of each of the measures across gender and age groups and in some cases by partnership status.

The next five papers present the wide range of psychological measures in W2. The first focuses on NSHAP’s mental health findings and provides an important resource for understanding the impact of mental health on diverse aspects of aging trajectories. Comparing the same items in W1 and W2, Payne, Hedberg, Kozlowski, Dale, and McClintock show significant differences in anxiety symptoms and perceived stress between waves and identify the reasons so that they can be adjusted for in analyses. Recommendations and guidelines are provided for scoring protocols for the measures, analytic methods, and interpretation. A short literature review for nonpsychologist users is also included. Iveniuk, Laumann, Waite, McClintock, and Tiedt explore variation in NSHAP’s battery of personality items, new in W2, adapted from the Midlife Development Inventory (MIDI). This paper shows that variation is primarily explained by five factors which correspond closely to the commonly used “Big Five” model of personality. Recommendations on how to use the items in analyzing links between personality traits, social factors, and health are provided.

Following the articles on mental health and personality measures are papers on sleep function and olfactory function. The approach to the collection of sleep data changed from W1 to W2, as discussed by Lauderdale and colleagues. In W2, sleep questions in the core survey were expanded and enhanced in response to evidence that single questions about usual sleep duration correlate poorly with measured sleep duration for older adults. Also in W2, a novel, objective measure of sleep duration and quality for 785 of a randomly selected third of participants was added. This includes three nights of data from wrist actigraphy and a 3-day sleep log. This is the first time objective sleep data are available for a representative sample of older adults in the U.S. population. The next article by Kern, Wroblewski, Schumm, Schumm, Pinto, and McClintock discusses olfactory function and its link to detection of social odors that may be critical to the physiology of social interactions, and even mental health. The use of the Olfactory Function Field Exam (OFFE), new in W2, is an accurate, simple method, and the first successful evaluation of odor detection in a representative survey setting. Finally, Pinto and colleagues summarize the sensory function measures available in W2, describe the significant changes from W1 and W2, and provide a roadmap for analyzing this data. Some objective sensory measures from W1 were not repeated W2, and instead the focus of W2 shifts to respondents’ reports of sensory loss and the associated social consequences. Their findings include prevalence and burden of sensory loss, sex differences in some sensory modalities, and differences in self-report and objectively measured vision. While other studies have included sensory measures, the sensory function data in NSHAP is the first from a nationally representative survey focused specifically older adults in the United States.

Gerontological assessment is the topic of the next group of four articles, which highlight the many innovative measures in NSHAP that are critical to understanding the health status of older adults. Vasilopoulos and colleagues provide information about the chronic conditions measured in NSHAP. They combine several new W2 chronic condition measures into two comorbidity indices, which can be used to provide insight into how disease burden influences health and aging. They discuss some notable gender differences in the prevalence of chronic conditions and report the most prevalent conditions as incontinence, arthritis, heart conditions, cancer, and diabetes. The next article, by Shega and colleagues, turns attention to the development of a multidimensional test of cognition, the Chicago Cognitive Function Measure (CCFM), which was successfully integrated into W2. The CCFM can be administered in the field by nonmedically trained personnel in 12 min or less and can be used to generate findings similar to the Montreal Cognitive Assessment (MoCA) instrument, from which it is derived. Since the CCFM performance showed response variability, this instrument allows for meaningful comparisons between cognition, health, and social factors. Huisingh-Scheetz and colleagues go on in their article to present several geriatric functional and geriatric syndrome measures collected in both W1 and W2. These measures include timed walk, repeated chair stands, falls, fractures, and accelerometry. Frailty status indicators are also examined. They find that functional measures worsen, and the prevalence of most syndromes increases with age. Finally, Shega, Tiedt, Grant, and Dale introduce the more comprehensive pain measures in W2, including pain presence, location, and intensity. Similar to prior research, more than half of the sample reports moderate or greater pain. They
also find that gender is a key predictor of anatomic location and intensity of pain, while age is associated with a few painful locations. Recommendations to investigators interested in pain are provided.

The last section of articles consists of four papers presenting the biomeasures of social life and disease, emphasizing the comparison between measures across W1 and W2. As biomeasures become more common in survey research, NSHAP W2 data protocols provide important evidence of successful collection and analysis across two waves in a longitudinal design. The article by Gregg, O’Doherty, Schumm, McClintock, and Huang explains why and how instrument effects can occur with biomeasures during collection, measurement, and calibration. They also recommend several strategies for cross-wave comparison of biomeasures, providing guidance on what sorts of analyses are and are not appropriate. Their work is specifically focused on glycosylated hemoglobin (HbA1C), but their discussion of measurement effects and strategies for future data collection is relevant for other biomeasures. The second wave saw improvements in data collection and storage protocols for measures of vaginal microbiology, described by Hoffmann, You, Hedberg, Jordan, and McClintock. The refinement of methods in W2 improved the detection of bacterial vaginosis and the presence of yeast, and thus made it possible to better understand their relationship with age. In their work, Kozloski, Schumm, and McClintock analyze salivary sex hormone data in W1 and W2 of NSHAP, which is the first U.S. probability sample studying these four hormones together. Among their findings are that older men have significantly higher levels of salivary testosterone and progesterone, and that testosterone and dehydroepiandrosterone show age-related linear decreases. The authors note wave effects from differences in laboratories used and suggest strategies for future saliva data collection and processing. The concluding article in this set, and the issue, by Reyes and colleagues, describes the introduction of a novel urine collection method. In W2, urine specimens were successfully collected in the home by nonmedically trained personnel. Urine analysis tested oxytocin (OT), vasopressin (AVP), and creatinine levels. In other research, both OT and AVP have been shown to play roles in mediating some social behaviors including pair-bonding, attachment, sexuality, and care-taking. NSHAP moves this research beyond the small convenience samples of previous research, providing an opportunity to examine associations between OT and AVP and social networks, health, and bonding in older adults.

In summary, the second wave of NSHAP data provides the possibility of longitudinal analyses of this rich, highly innovative dataset regarding the intimate social relationships and health of older, community-dwelling adults. It provides the multidisciplinary research community with the means to assess how changes in social support and intimate relationships are intertwined with changes in major health domains and aging processes. The W2 NSHAP survey not only preserves consistencies in key measures from W1, thereby providing the basis to assess intraindividual change in health and aging, but the survey is also innovative in collecting new measures and information about partners that speak to the core aims of the study. These innovations are critical as studies uncover evidence that point to new approaches and research questions to elucidate the factors influencing the health and aging experiences of the older American population. NSHAP’s emphasis on the roles of social support and intimate social relationships make it an important and unique member of a family of nationally representative surveys that are offering unique insights into the forces shaping the older population’s health trajectories and aging experiences.

NSHAP has already led to over 200 papers in the peer-reviewed literature. The new data from W2 will provide many additional opportunities for increased scientific productivity. This special issue will go a long way to guiding both new and experienced scientists interested in the important issues covered here.

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