Osher NRC
National Resource Center for Osher Institutes

Report on the 2018 National Survey of the Osher Lifelong Learning Institutes' Membership

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The Osher Lifelong Learning Institute (OLLI) network began with a single program at the University of Southern Maine in 2001. Today, the OLLI network is comprised of 124 university-based lifelong learning programs across the United States. Each OLLI has received endowment funding from The Bernard Osher Foundation and continues to receive a variety of services from the National Resource Center for Osher Lifelong Learning Institutes (Osher NRC) at Northwestern University. The OLLI network's total enrollment has reached approximately 170,000 members. In general, OLLI members are at least 50 years old and retired from full-time employment, but OLLI programs and members are not homogenous in backgrounds and experiences across the OLLI network.

This report presents the results of the third national membership survey of a representative population of the OLLI network, conducted in the fall of 2018 by the Osher NRC. The Osher NRC's recurring membership survey has three purposes: (1) identify demographic characteristics of the OLLI membership; (2) ascertain the extent to which the OLLI population reflects often-discussed characteristics of older adult lifelong learners; and, (3) identify course topic interests [1]. Since 2016, the Research Review Committee of the Osher NRC selects a unique subject of interest to explore. The 2016 survey investigated OLLI members' perceptions and realizations regarding the value of lifelong learning to older adults. The 2018 survey asked about OLLI members' satisfaction with relationships and is discussed in this report. Finally, the results of this survey are compared to the two prior membership surveys conducted by Osher NRC in 2014 [1] and 2016 [2-5].

Methodology

A. Survey Development

All three surveys were developed by the authors and then refined through discussions with the Research Review Committee of the Osher NRC. The 2016 and 2018 surveys were administered in both online and paper copy formats; the 2014 survey was administered online only. The full survey instrument utilized in the 2018 study is found in Appendix 1. The questionnaire was only written and distributed in English.

While most questions are consistent across the three survey years allowing for robust forms of trend analysis, particular adjustments were made to improve the quality of the data and subsequent data analysis. Minor adjustments were made to the order of the questions between the 2018 and 2016 questionnaires. Other adjustments included adding a question about social media use. The 2014 questionnaire had asked about this topic; however, fewer platforms were shown as options.

As noted earlier, the research team now selects special singular topics to explore. The 2016 questionnaire asked about the value of participation in lifelong learning. Two items concerning relationship satisfaction replaced this item in the 2018 questionnaire. The first item asked the

respondents to rate their level of happiness with their current social relationships. The second item was an open-ended question regarding how the OLLI community helped in the development of meaningful relationships/social interactions with others.

Notably, the 2014 questionnaire differed from both the 2016 and 2018 surveys. The 2014 survey did not have questions about race/ethnicity, LGBTQ identity, interests blended or online OLLI courses, and barriers to participation in OLLI programs. Also, the 2014 survey had a question about relocation, but the question was updated for clarity in the two later surveys.

B. Survey Sample

The Research Review Committee of the NRC chose fourteen OLLI programs they believed best exemplified the diversity of geography, program size, host university characteristics, and program age of the OLLI network as a whole. These programs are listed in Table 1. The first eight of these programs were the respondents in the 2014 survey, and the first twelve participated in 2016. Unless otherwise noted in this report, comparisons between 2014, 2016, and 2018 results are made using only responses from these eight programs.

The OLLI programs were responsible for distributing information about the survey process. OLLI programs generally distribute information via electronic communication mediums, such as email lists. These programs were allowed to tailor their messaging; however, Osher NRC did provide initial language about the survey.

A total of 5,999 individuals from the fourteen OLLI programs responded to the 2018 survey. These respondents generated an overall participation rate of 29.3%. For previous survey iterations, the corresponding percentage was 32.7% in 2016 and 40% in 2014. In line with today's social science research [6], the survey response rate was deemed acceptable for analysis; however, the Research Review Committee of the NRC is exploring strategies to boost this participation rate in the future. The committee is especially looking to encourage respondents who took part in previous surveys to participate in subsequent surveys.

A total of 5,636 (93.6%) of responses were deemed suitable for data analysis by the authors of this report. A survey was not used if (a) respondents did not consent to participation; (b) they did not indicate their age range; and/or, (c) they did not indicate their gender. The age and gender requirement was imposed across the three survey years because of the importance of sorting responses by these two variables in the trend analysis.

C. Survey Process

The survey questionnaire and process were reviewed and approved (as an exempt study) by the Institutional Review Board at Northwestern University prior to administration. This approval was provided to the host institutions of the participating programs for their review. Informed consent protocols were followed, such that OLLI members were asked if they were willing to voluntary participate in the survey process.

The survey was administered to the fourteen Osher Lifelong Learning Institute aforementioned programs (see again Table 1). Osher NRC administered the survey. Each program participated separately. Survey Monkey was utilized for the online version, and physical distribution of paper

copies of the survey was used to ascertain responses from respondents who preferred that format. Results from the paper copy responses were then manually entered into Survey Monkey.

The Survey Monkey data was exported into an Excel spreadsheet of results for each program. To ensure confidentiality, the IP address of the respondent (the only possible identifying information collected) was discarded before post-analysis of the data was performed. The spreadsheets for each program were then combined into a single consolidated spreadsheet for analysis of the composite data set.

Results

The 2018 survey results for all fourteen programs for age, gender, ethnicity, LGBTQ identity, educational attainment, technology and distance education utilization, relocation, barriers to OLLI participation, course topic preferences, and degree of satisfaction with social relationships are presented sequentially below. In comparisons of 2016 and 2018 responses, responses from the twelve programs involved in the 2016 survey are used; and in comparisons with 2014, data from the eight programs participating that year are used.

A. Age and Gender

Figure 1 shows the distribution of respondents by age and gender. The X-axis is the percentage of individuals in each age range, and the Y-axis the age range. Two characteristics of the data are particularly noteworthy. First, as with the 2016 survey, the 70-74 age range yielded the largest proportion of respondents. Second, women proportionally outnumber men across most of the age spectrums. The total percentage of female and male respondents was 68.7% and 31.3%, respectively. The percentages for the eight programs in 2018 was 70.3% and 29.7%, and for these same eight programs in 2016 69.1% and 30.8% and in 2014 70.1% and 29.8%.

Figure 2 shows the ratio of male to female respondents in each age range. This ratio increases monotonically from the 55-59 age range to 85 and above population. In sum, women appear to outnumber men proportionally less as age increases; however, women still appear to outnumber men regarding OLLI participation. This increasing ratio of men to women with age is seemingly counterintuitive, in that women have longer average life expectancy than men. Except for the under 55, 55-59, and 85 and over populations, these results are similar to 2016 results. These differences may be attributed to relatively small sample sizes found in the lowest and highest age ranges.

An important change in the OLLI population is seen in Figure 3, which shows the percentage of individuals in age ranges 70-74, 75-79, 80-84, and 85 and above for the three survey years. In sum, the OLLI population appears to be growing older. The percentage of individuals age 70 and above has grown from 51.8% (2014) to 58.0% (2016) to 63.9% (2018). This differences between the 70 and above population in 2014 and 2016, and that between 2016 and 2018, are both statistically significant ($\chi^2 = 24.90$, $p < .001$; $\chi^2 = 25.96$, $p < .001$, respectively). These differences are exacerbated in the 70-79 range, which went from 39.6% in 2014 to 45.2% in 2016 to 50.6% in 2018. Substantially smaller changes are observed in the 80-84 and 85 and above ranges.

B. Marital Status

The majority of 2018 survey respondents are married/partnered (63.9%). Smaller percentages are single (20.6%) or widowed (15.2%). These results are similar to those for earlier surveys. Gender and age differences are apparent regarding marital status. The percentage of women in this survey who are married/partnered, single, and widowed are respectively, 54.5%, 25.9%, and 19.2%; while for men, the corresponding percentages are 84.5%, 9.0%, and 6.3%. These gender differences are all statistically significant (e.g., women compared to men who are married/partnered $\chi^2 = 475.6$, $p < .001$). Figure 4 shows the percentage of men and women who are married in each age range. This percentage is larger for men than for women in all age ranges, with the difference becoming more prominent with increasing age. Except for the two lowest age ranges (under 55 and 55-59), the gender differences in each age range are also statistically significant. For example, in the 85 and above range $\chi^2 = 45.30$, $p < .001$; and in the 60-64 age range $\chi^2 = 6.038$, $p < .05$.

C. Race/Ethnicity

In the 2018 survey, the same question about race/ethnicity was used as in 2016. The results for the non-White population are shown in Table 2, for both the 2016 and 2018 surveys. The percentages of the two largest non-White groups (African American and Hispanic/Latino) appear to have increased from 2016 to 2018. The difference in Black/African American respondents between the two years is not quite statistically significant ($\chi^2 = 3.338$, $p < .1$). The difference in the Hispanic/Latino respondents for the two years is statistically significant ($\chi^2 = 16.358$, $p < .001$). The same is true for the change in overall non-White respondents between 2016 and 2018 ($\chi^2 = 11.120$, $p < .001$). This difference is statistically significant whether or not the “Other” is included in the non-White category.

D. LGBTQ Identity

In the 2016 survey of 12 programs, 3.14% of respondents identified themselves as members of the LGBTQ community. This percentage appears to have grown to 3.35% for the same 12 programs in 2018. For all 14 programs the percentage was slightly larger at 3.42%. The difference in the 2016 and 2018 results represent an increase of 10 respondents out of approximately 5000, which was an expected year-to-year variation. No question about LGBTQ identity was included in the 2014 survey.

E. Education Completed

Figure 5 shows the percentage of the 2018 survey respondents who have completed various levels of education, ranging from some high school to doctoral and non-doctoral professional degrees. The percent of men and women at each educational level is also shown. Most evident is the high educational level of OLLI respondents, with nearly 90% having a bachelor’s degree or higher. Additionally, a higher percentage of women than men have obtained all precollege levels, bachelor’s, and master’s degrees. A higher percentage of men have achieved doctoral and non-doctoral professional degrees.

Figure 6 compares the percentage of men, of women, and of total survey respondents who have a bachelor’s degree or higher for the three survey years (using only survey respondents from the eight original programs). A slight increase is depicted from 2014 to 2018 in the total percentage of respondents with bachelor’s degree or higher (87.7% to 89.6%). The differences between the total respondents with bachelor’s degree or higher between 2014 and 2016 fail to reach statistical significance, but are close ($p < .1$). The difference between 2014 and 2018 is statistically significant

($\chi^2 = 5.766$, $p < .05$). The corresponding percentages for men went from 94.4% to 95.4%, and for women from 84.7% to 87.2%. A straightforward comparison for percentages of respondents with master's, doctoral, and non-doctoral professional degrees is not possible because of the slightly different ways the question was posed in the three surveys.

F. Employment

In each of the three survey years, the same question has been posed about working (full or part-time) or looking for work. The answer to this question has potential implications for lifelong learning programs in that work introduces additional time and schedule constraints on respondents. Figure 7 shows the total percentage of respondents working or looking for work in each of the three surveys as a function of age (in each case for the 8 OLLI programs involved in the 2014 survey). This percentage in general decreases with increased age. Additionally, the total percentage of respondents working or looking for work appears to have decreased over time, from 20.2% in 2014 to 16.6% in 2016 to 13.9% in 2018. These differences in the percentage of respondents working or looking for work over time are statistically significant (For 2014 to 2016, $\chi^2 = 14.31$, $p < .001$; and for 2016 to 2018 $\chi^2 = 9.80$, $p < .01$).

G. Relocation

In both the 2016 and 2018 surveys, the question about relocation was posed in terms of years since retirement. The total percentage of respondents who have relocated in the past nine years went up slightly from 2016 to 2018 (26.9% to 28.3%). Additionally, the percentage of individuals age 69 and below who relocated was somewhat higher than those 70 and above in both 2016 and 2018. In 2018, the percentages for the lower and higher age groups were 32.6% and 25.9%, respectively.

Individual programs have substantial variations around these averages in 2018, as was the case in 2016 as well. In 2018, Furman University and Colorado State University had the largest percentages of respondents who have relocated in the past nine years, at 47.7% and 42.0%, respectively. On the low end of the relocation scale, 15.6% of Aquinas College respondents have relocated in the last 9 years, with the corresponding numbers at University of Connecticut and San Francisco State University 14.9% and 12.5%, respectively.

H. Computer Technology, Distance Education, and Social Network Utilization

In this study, both desktop/laptop computers and iPads/tablets are considered "computers", in that they are gateways to the virtual worlds of email, social networks, online courses, and the World Wide Web more generally. The percentage of OLLI members reporting that they use a laptop/desktop computer and/or an iPad/tablet appears virtually unchanged across the three survey years (98.8% in 2014, 98.7% in 2016, and 99.1% in 2018). In contrast, iPad/tablet use has appeared to increase significantly (from 43.6% in 2014 to 63.5% in 2018). Smartphone use, which was almost the same as iPad/tablet use in 2014, had almost doubled to 84.7% in 2018. Figure 8 shows that the percentage of iPad and smartphone users as a function of age in 2018 (in the original 8 programs). The data show that the use of these devices is quite pervasive except at the highest age ranges.

Across all three survey years, participants were asked a question about experience with non-OLLI distance education resources. This number appears to have increased from 18.6% of respondents in 2014 to 21.7% in 2016 to 21.9% in 2018. Not surprisingly, this percentage is higher at the lower age (46.7%) range than the highest (25.3%). Thinking that distance education in some form may be

considered by some OLLI programs to overcome barriers to participation (e.g., for members who have health or mobility limitations or that live far from campus), the 2016 and 2018 surveys also asked about willingness to participate in blended in-person and online OLLI courses. The results were quite similar in the two years, with 49.9% of 2016 survey respondents extremely or somewhat likely to take such a course. The corresponding result in 2018 was 48.4%.

The extent of social network utilization by OLLI member is also potentially relevant to individual OLLI programs that may wish to use such platforms for communication and information dissemination to members. The 2014 survey asked about use of Facebook, LinkedIn, and "Instagram, You Tube, or other photo or video sharing sites". In 2016, no social media question was included, but in 2018 the survey questionnaire asked about Facebook, YouTube, Pinterest, Twitter, LinkedIn, Instagram and Snapchat, along with an "other" category and an option of little or no use of social media.

Several important insights emerge from the 2018 survey regarding social media. First, Facebook appears to be the most used platform (49.3% of respondents), followed by YouTube (37.2%), Pinterest (14.5%), Instagram (12.9%), and LinkedIn (11.5%). Twitter and Snapchat have substantially lower utilization levels at 6.87% and 1.08%, respectively. A total of 38.9% of respondents report infrequent or no use of social media. Second, the utilization of most of these platforms is gender-dependent (Figure 9). A higher percentage of women than men use Facebook, Pinterest, Instagram, and Snapchat, whereas LinkedIn is used by a higher percentage of men. The usage of YouTube and Twitter is nearly the same for men and women. A substantially higher percentage of men than women report that they rarely or never use social media. And finally, users of one social media platform are likely to use other platforms as well. For example, 71.4% of YouTube users also use Facebook.

Social media utilization was compared between the 2014 and 2018 surveys to explore potential insights. To make this comparison, this analysis considers 2014 utilization of "Instagram, YouTube, or other photo or video sharing sites" to be the same as 2018 responses indicating use of one or more of the following: YouTube, Pinterest, and Instagram. Snapchat was not included in this grouping because of its very low utilization rate. The results are shown as a function of age for these two years in Figure 10. A higher level of use is shown in 2018 than 2014, and use appears to decrease as age increases. Increases in use between 2014 and 2018 are also observed for Facebook, YouTube, and LinkedIn, but not as large as for photo/video sharing sites.

I. Barriers to Participation in OLLI Programs

In the 2016 and 2018 surveys, respondents were asked to identify barriers to their participation in OLLI programs. The choices provided were the ones commonly mentioned to OLLI program directors. The results for the two surveys were quite similar. The barriers most commonly cited in 2018 were time (16.6%), cost (6.1%), and transportation (3.4%), and mobility (3.0%). The corresponding percentages in 2016 were 16.2%, 7.1%, 3.6%, and 2.8%. The most noteworthy difference in the 2016 and 2018 results was the decrease in the percentage of respondents indicating that they had no barriers to OLLI participation, from 71.7% to 65.8%. This difference between the two years is statistically significant ($\chi^2 = 42.48$ and $p < .001$). Additionally, in 2018 a higher percentage of younger (64 and below) respondents found time a barrier than those 65 and above (23.8% compared to 15.6%). In contrast, transportation was a dominant barrier for those who are 80 and above (7.1%), compared to those 79 and below (2.6%). These age differences in time and transportation as barriers are both statistically significant ($\chi^2 = 411.10$, $p < .001$ and $\chi^2 = 29.92$, $p < .001$, respectively).

J. Topical Areas of Greatest Interest

An important question for OLLI programs is the participant's areas of highest interest for course offerings and other types of learning experiences. In the 2018 survey, respondents were asked to indicate their top three choices of interest from the list of 13 content areas shown in the survey (Appendix 1, question 15). An identical question was asked in the 2016 survey; and in the 2014 survey, the question was the same except the option of "travel" was not included.

The ranking of these thirteen topical areas, based upon percentage of survey respondents listing the area as one of their top three, is shown in Figure 11. Each of the top eight topical areas were selected by at least 20% of respondents and are very similarly ordered for 2018 and 2016. The only exceptions are that, in 2016, Religion/Philosophy/Spirituality ranked very slightly higher than Health and Wellness; and Travel ranked very slightly higher than Science/Mathematics. The ranking of the lowest five areas was quite similar, though not identical, for 2018 and 2016.

Figure 12 shows the percentage of each gender choosing one of the top seven topical areas. Women are more likely to select courses in Fine Arts, Literature, Health and Wellness, and Religion/Philosophy/Spirituality. Men show a greater affinity than women for History, Current Affairs, and Science/Mathematics.

K. Satisfaction with Social Relationships

The 2018 survey is the first in which questions were posed about how happy respondents are with their social relationships/friendships. Question 17 allows each participant to choose whether they are "Very Happy", "Happy", "Unhappy", or "Very Unhappy" with these relationships. Question 18 is an open-ended question about how OLLI participation has contributed to these interactions. An analysis of the former is provided here, and responses to the latter will be presented in a separate report.

Most respondents (90.0%) indicated that they were either "Happy" or "Very Happy" with these relationships. The difference in response of women and men was small (90.3% compared to 89.3%). It is, nevertheless, statistically significant ($\chi^2 = 21.19$, $p < .001$). Small differences in these percentages with marital status were also noted (90.9% for married, 87.6% for single, and 89.8% for widowed). The difference between the responses of married and single respondents is statistically significant ($\chi^2 = 10.71$, $p < .001$). In contrast, the differences between married and widowed and between single and widowed are not statistically significant.

The more significant and interesting variations were seen with age category and also in relation to perceived barriers to OLLI participation. Figure 13 shows the percent in each age range that are "Happy" or "Very Happy" with these relationships. Disregarding the under 55 age range, for which the results are unreliable because the number of respondents is very small, an increase with age in the percentage of respondents that are "Happy" or "Very Happy" is observed. This percentage peaks slightly over 92% for the 75-79 range and then declines as age increases further. These differences are not quite statistically significant at the $p = 0.05$ level for adjacent age ranges (e.g., 70-74 compared to 75-79 has a $p < .1$). In contrast, the differences in those who are happy or very happy in the 55-59 and 65-69, and also that between 75-79 and 85 and above, are statistically significant ($\chi^2 = 7.08$, $p < .01$; $\chi^2 = 10.41$, $p < .01$, respectively).

Figure 14 shows the percentage of respondents "Happy" or "Very Happy" with social relationships friendships is very high among those who indicate they have no barriers to those who have no

barriers to OLLI participation 91.0%) or who indicate that time is their only barrier (91.1%). The corresponding percentages are lower for those who indicate that physical mobility, transportation, or cost are barriers to OLLI participation (85.5%, 81.2%, and 80.6%, respectively). The difference between those who report no barriers and those who report barriers, such as physical mobility, transportation, or cost, are statistically significant (e.g. the comparison of no barriers and physical mobility gives $\chi^2 = 5.928$, $p < .05$). The differences in response level for those having physical mobility, cost, and transportation, limitations are not statistically significant.

Conclusions and Further Study Planned

A. Demographics

Older adults aged 70 and above appear to constitute the majority of OLLI population, which is similar to previous survey administrations [1, 3-5]. This majority proportion appears to have slightly increased across the three survey years; however, causality for this apparent increase cannot be verified by this study's sampling procedures. A random sample of all OLLI participants and programs is needed to explore any notions of causality. Therefore, the following observations are are descriptive of relationships, but do not suggest causality.

The age range differences may be linked to age differences in employment seeking behavior and status, which has been suggested in previous OLLI network studies [1, 3]. Employment and employment seeking behaviors appear to have slightly decreased across the three survey administrations. While causality cannot be shown, these slight changes may be linked to economic factors, such as decreases in the U.S. unemployment rate [7].

Women continue to outnumber men across all age ranges regarding OLLI participation; however, this appears to proportionally decrease with age. The OLLI network has a large opportunity to attract more men to participate, especially in the younger age ranges. Again, these notions have been echoed in previous OLLI network studies [2-5]. Gender differences in course topic preferences may provide insights into how to attract more men to participate, but these notions need further investigation. Furthermore, less than four percent of OLLI learners identify as LGBTQ. Course topic differences among others must be explored more in-depth to create more inclusive programs that are attractive to gender sexual minority persons.

The majority of OLLI network learners are married or partnered. Male OLLI participants appear more likely to be married or partnered compared to their female counterparts. This proportional difference between men and women appears to increase as OLLI learners age. Again, while causality cannot be determined, recent research has highlighted that spouses may be determined factors in lifelong learning participation [8].

OLLI network participants still appear to come from mostly White racial and ethnic backgrounds. The 2018 survey indicates that this demographic area is shifting, albeit slightly. These shifts may be slightly mirroring shifts in U.S. demographics, which also encompass shifts in education levels [9]. Education levels of OLLI learners appear to have slightly increased across the three survey years. Researchers have suggested that systematic links between education levels and racial/ethnic identities may create barriers to lifelong learning for non-White individuals [3]. More research is need in the OLLI network to explore how to be more inclusive.

B. Other Relevant Characteristics of Learners

Relocation trends appear to have increased for OLLI learners; however, these trends differ across institutions. OLLI institutes would do well to explore the demographics of the older adults have relocated and are relocating to their areas. The U.S. Census provides information on state-to-state migration flows; however, diving into the demographics of relocated individuals can be more tedious. Given the institutional differences, OLLI institutes may be well-served to conduct self-studies of those who have relocated to their areas.

In general, technological device and social media use has increased across the past three survey administrations, which is in line with previous studies of older adults and technology [10]. Only older adults at the higher age ranges appear less tech savvy or tech friendly, which is consistent with previous research [5, 10]. Facebook appears to be the most popular form of social media used by learners in the OLLI network. Women also appear to use social media more than men, with the exception of LinkedIn. Osher Institutes would do well to consider age and gender differences in their promotional materials and engagement strategies. Furthermore, distance learning experience, which has been posited as a strategy to decrease barriers to lifelong learning [5], appears relatively consistent between 2016 and 2018 at just less than 50%.

Time remains the largest barrier to greater participation in OLLI programs, especially for younger older adults. Transportation remains a barrier to participation, but is more of barrier for the oldest older adults, which may be related to mobility limitations [3, 5]. While generalizations cannot be unequivocally made across the OLLI network regarding barriers, the OLLI network must be aware of the changes in individuals reporting no barriers to lifelong learning.

C. Topics

Osher Institutes can consider the topical preferences of older adult learners shown in Figure 11 in this study. But, Figure 12 showing gender differences may be more important depending on the enrollment aims of each institution. A larger study comparing topical differences across survey administrations, across institutions, and other learner characteristics can be undertaken by the Osher NRC and individual institutions to gain more insights.

D. Satisfaction with Social Relationships

Fortunately, satisfaction with social relationships is high among OLLI learners. The OLLI network (and lifelong learning in general) not only provides opportunities for intellectual stimulation, but socialization as well [2, 4]. A larger study needs to be undertaken to better understand those who are less than happy within the OLLI network.

E. Final Notes

The Osher NRC is committed to continuing the National Membership survey research on a biannual basis. This is part of its ongoing work to benefit the Osher Institute Network and to contribute to the scholarly discovery of the impact of lifelong learning institutes on the lives of older adults.

Biographies of Authors

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Richard C. Knopf is professor of Community Development at Arizona State University, and directs its Osher Lifelong Learning Institute at ASU. Dr. Knopf has formulated a vision for OLLI at ASU that fuses adults 50 and over with the intellectual and cultural resources of Arizona State University, while providing meaningful pathways for community engagement. He also heads ASU's Partnership for Community Development and ASU's Age Friendly University initiative, while serving on a multinational steering committee for introducing Age Friendly design principles into universities on a global scale. Research interests include: lifelong learning pedagogy, the role of community formation in optimizing learning experiences, and determinants of abundant aging and social wellbeing.

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Appendix 1: Survey Questionnaire

2018 Osher Institutes Membership Study Questionnaire

1. What is your age?
    a. Under 54
    b. 55-59
    c. 60-64
    d. 65-69
    e. 70-74
    f. 75-79
    g. 80-84
    h. 85 +

2. What is your gender?
    a. Female
    b. Male

3. What is your marital status?
    a. Married/Partnered
    b. Single
    c. Widow(er)

4. Would you consider yourself a member of the LGBTQ community?
    a. Yes
    b. No
    c. Prefer not to answer

5. What do you identify as your primary race or ethnicity?
    a. American Indian or Alaska native
    b. Asian
    c. Black or African American
    d. Hispanic or Latino
    e. Native Hawaiian or other Pacific Islander
    f. White
    g. Two or more races or ethnicities
    h. Other (please specify)

6. What is the highest level of education you have completed?
    a. Grade school or some high school
    b. High school, diploma or GED
    c. Associate's degree or equivalent
    d. Bachelor's degree or equivalent
    e. Master's degree or equivalent
    f. Doctoral degree
    g. Other terminal professional degree (non-doctoral)
    h. Other (please specify)

7. Which, if any, of the following technologies do you use? (Check all that apply)
    a. Laptop or desktop computer
    b. iPad or other tablet device
    c. Smart phone (iPhone, Android, Blackberry, etc.)
    d. Other (please specify)

8. Which of the following social media sites do you use routinely? (Check all that apply)
    a. Facebook
    b. YouTube
    c. Pinterest
    d. Twitter
    e. LinkedIn
    f. Instagram
    g. Snapchat
    h. I rarely or never use social media
    i. Other social media site, (please specify):

9. Have you taken at least one Osher course that was a blend of face-to-face and online learning?
    a. Yes
    b. No

10. Have you participated in online courses or lecture series that were not affiliated with Osher? For example, iTunes University, a Massive Open Online Course (MOOC), Coursera, etc.?
    a. Yes
    b. No

11. How likely are you to participate in an online or hybrid (part in-person, part online) Osher course or discussion group?
    a. Very likely
    b. Somewhat likely
    c. Somewhat unlikely
    d. Very unlikely

12. What is your current employment status?
    a. Never employed
    b. Fully retired
    c. Work part-time
    d. Work full-time
    e. Currently seeking employment

13. How many years ago did you leave full-time employment?
    a. 1 – 2 years
    b. 3 – 5 years
    c. More than 5 years
    d. I did not work full-time outside the home
    e. Not applicable (I am still working full-time)

14. When did you move to the community/area in which you now reside?
   a. Within the past three years
   b. 4 – 6 years ago
   c. 7 – 9 years ago
   d. More than 10 years ago
   e. I have lived here for most or all of my life

15. What are the primary areas of interest in the Osher courses or discussion groups you participate in? (please choose up to three)
   a. Fine arts (e.g., music, theatre, studio art, film)
   b. Literature
   c. Foreign languages
   d. History (regional, United States, International)
   e. Current affairs/public policy
   f. Business, finance, economics
   g. Science and mathematics
   h. Technology and computing
   i. Photography
   j. Crafts, hobbies, games
   k. Health and wellness (e.g., exercise, nutrition)
   l. Religion, philosophy, spirituality
   m. Travel programs

16. Are there any barriers to your attending Osher courses or events? (Check all that apply)
   a. Cost
   b. Hearing
   c. Language
   d. Physical mobility
   e. Time
   f. Transportation
   g. Health
   h. No barriers
   i. Other (please specify)

17. How happy are you with your current social relationships or friendships?
   a. Very Unhappy
   b. Unhappy
   c. Happy
   d. Very Happy

18. How has your OLLI community helped you develop meaningful relationships or social interactions with others? Please share activities, events, and/or interactions that were/are meaningful to you. (open-ended)

Appendix 2: Tests of Statistical Significance

Chi squared tests were employed to determine the statistical significance of the difference between quantities, both within the same survey and also between surveys. The calculations were performed with an add-on statistical package to Excel provided by Real Statistics.

Table 1: Overview of Survey (2018 compared to 2014 and 2016)

Institution	Current Total Members	Total 2014 Surveys	Total 2016 Surveys	Total 2018 Surveys	2018 Surveys for Analysis	Percent of Members	2018 8 Program Surveys for Analysis	2018 12 Program Surveys for Analysis
Boise State University	1,600	603	557	625	587	36.7	587	587
Colorado State University	759	89	142	303	275	36.2	275	275
Furman University	2,336	483	639	480	467	20	467	467
San Francisco State University	848	66	270	254	231	27.2	231	231
University of California Irvine	767	161	199	204	201	26.2	201	201
University of Connecticut	726	356	208	167	154	21.2	154	154
University of Kansas	1,511	658	764	542	514	34.2	514	514
University of Southern Maine	2,126	690	825	869	808	38.0	808	808
Hampton University	928		120	167	153	16.5		153
Northwestern University	1,371		416	288	284	20.7		284
University of Delaware	3,734		1,238	974	921	24.7		921
University of Miami	1,240		183	379	348	28.1		348
Aquinas College	1,130			398	369	32.7		
University of New Mexico	1,416			349	324	22.9		
TOTAL MEMBERSHIP	20,492							
USABLE SURVEY RESPONSES		3106	5561	5999	5636	27.5	3237	4943

FIG. 1: 14 Program Age Distribution
(percent of participants in each age range)

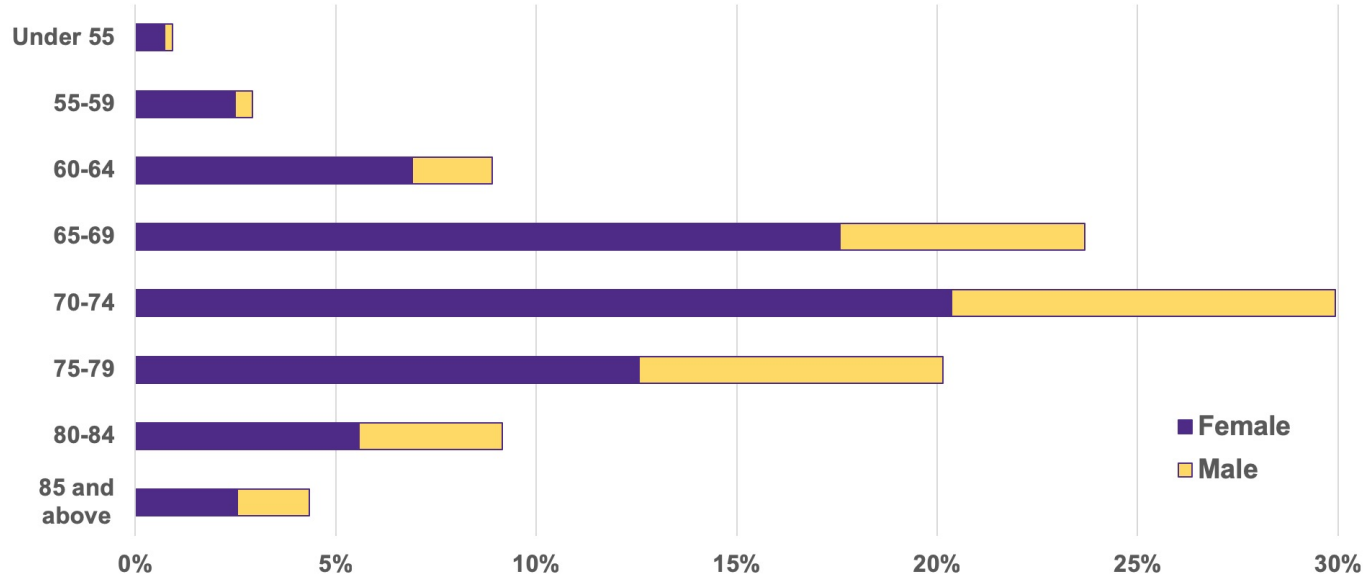

FIG. 2: 14 Program Ratio of Male to Female
(percent of participants)

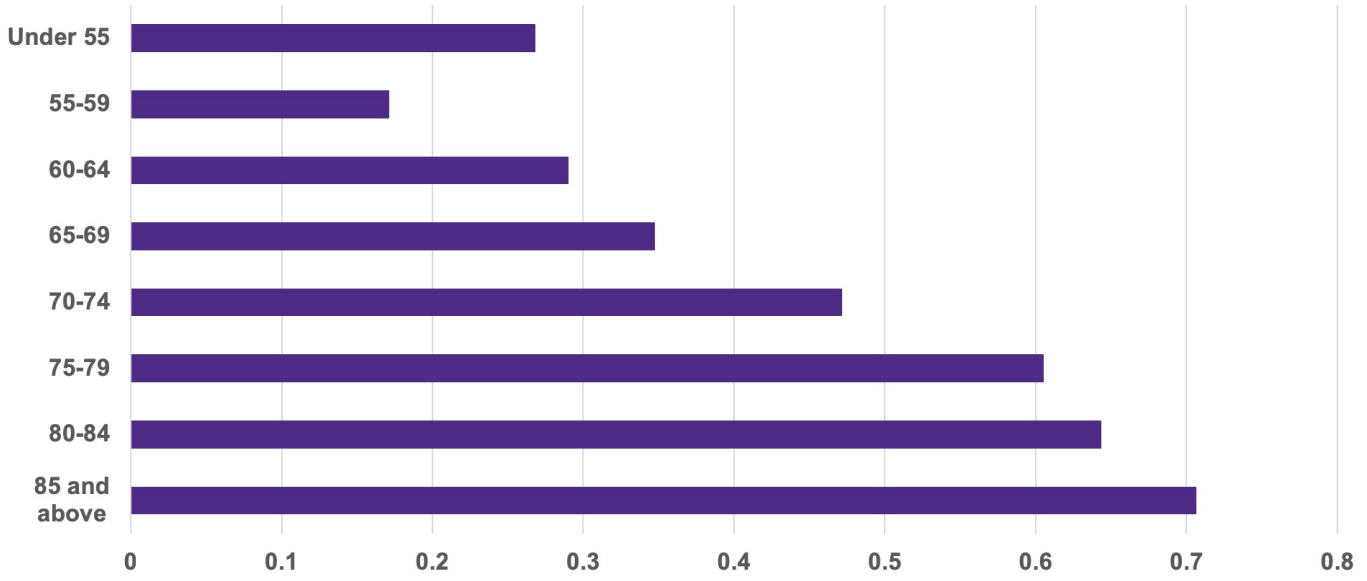

FIG. 3: Age 70 and Above for Three Survey Years

(percent of participants)

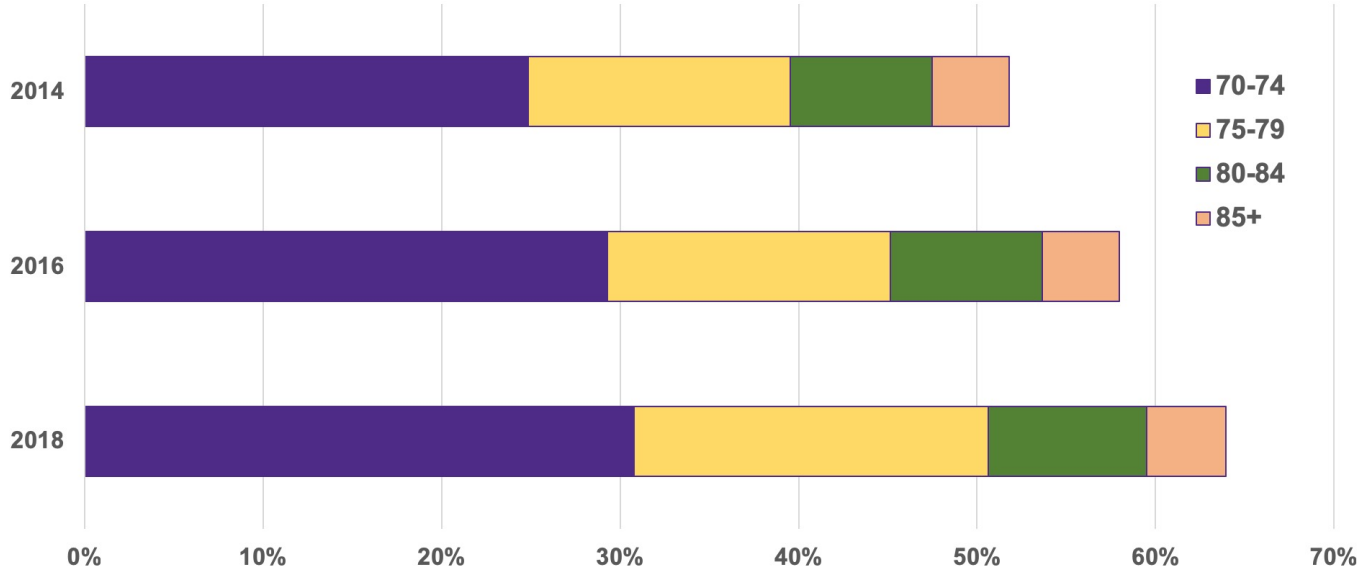

FIG. 4: Age and Gender Dependence of Marital Status

(percent of participants in gender and age range)

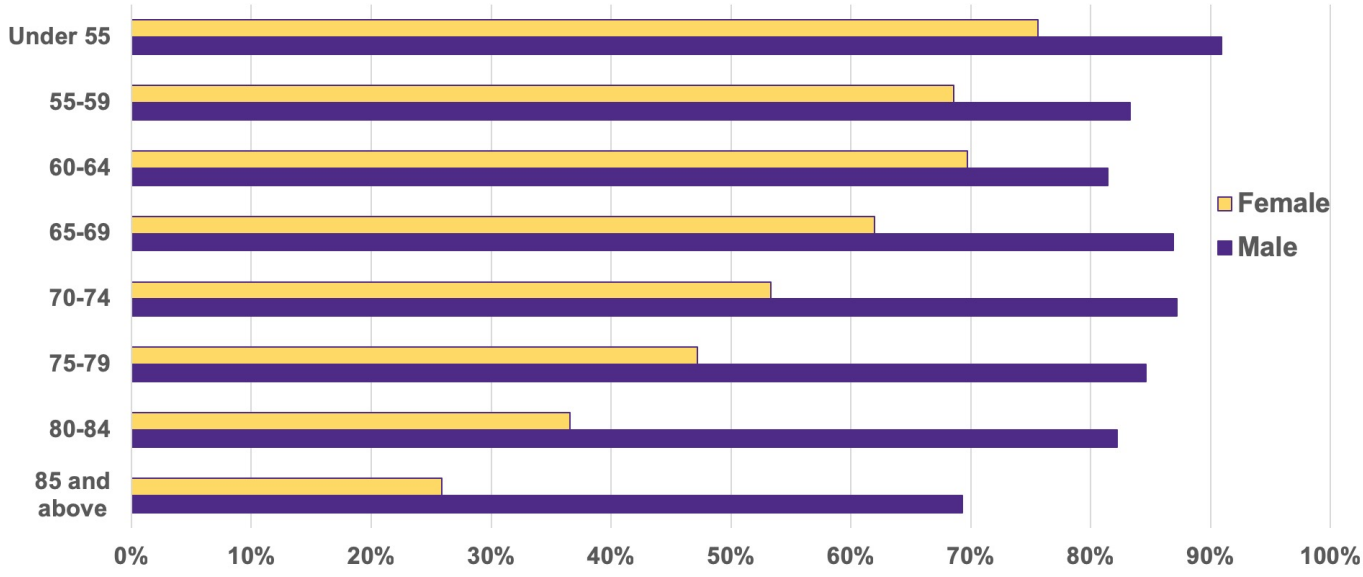

TABLE 2: Non-White Participants in 12 Programs in 2018 and 2016
(percent of participants)

	2018	2016
Black/African American	3.28%	2.66%
Hispanic/Latino	1.52%	0.69%
Asian	0.55%	0.75%
Native Hawaiian/Pacific Islander	0.02%	0.02%
Two or more	1.15%	0.97%
Other	0.67%	0%
Total Non-White	8.61%	6.64%

FIG. 5: Education Level of 2018 Survey Participants
(percent of total, of women and of men)

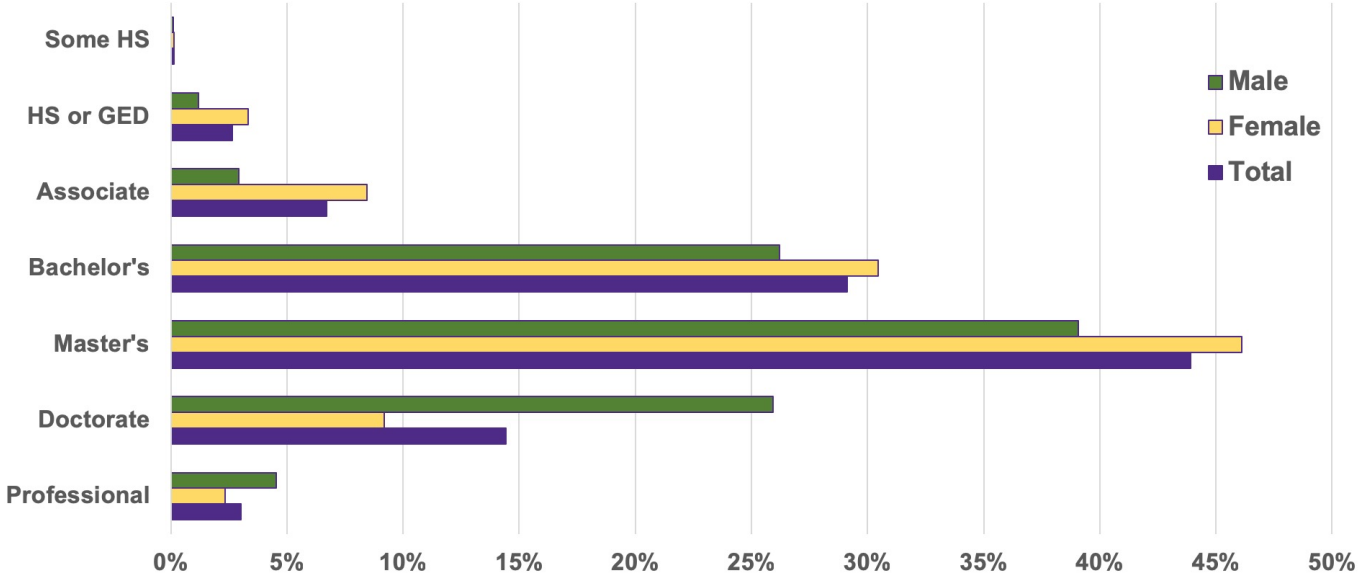

FIG. 6: Bachelors Degree or Above for Three Survey Years

(percent of participants)

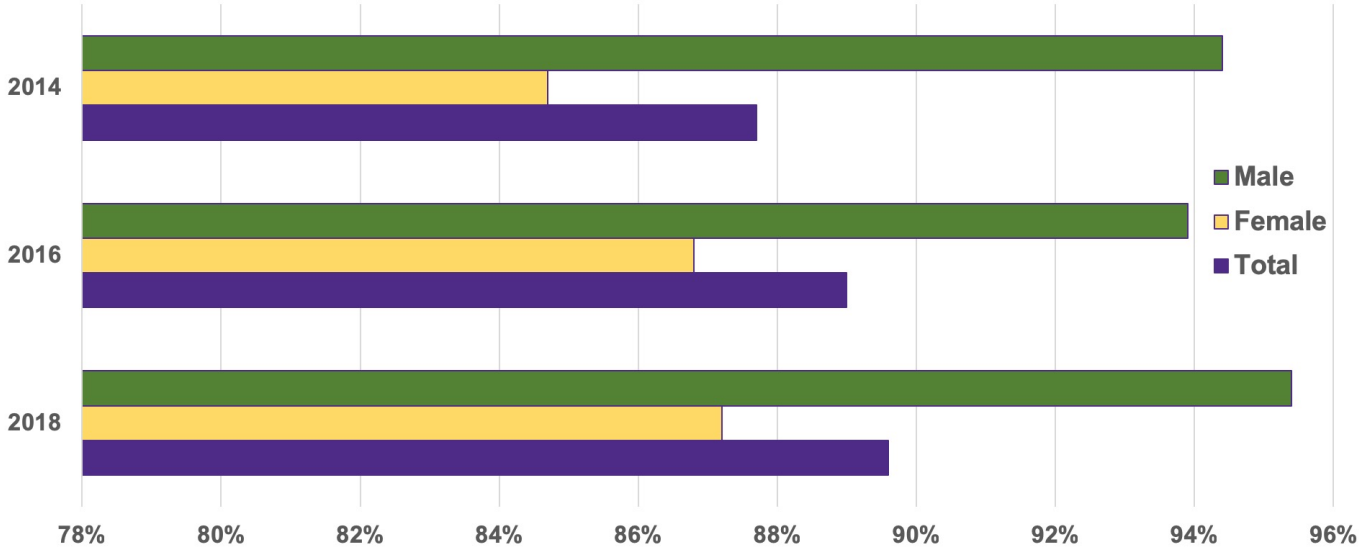

FIG. 7: Participants Working or Looking for Work

(percent of participants)

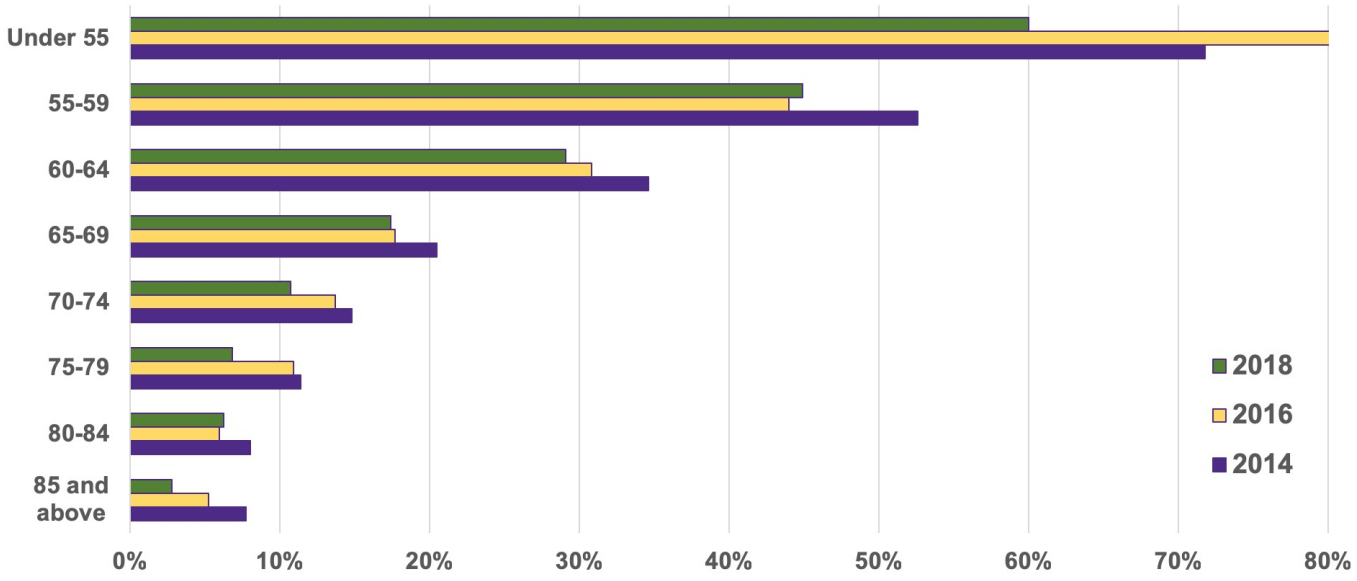

FIG. 8: IPad/Tablet and Smartphone Use

(percent of 2018 participants in 8 programs)

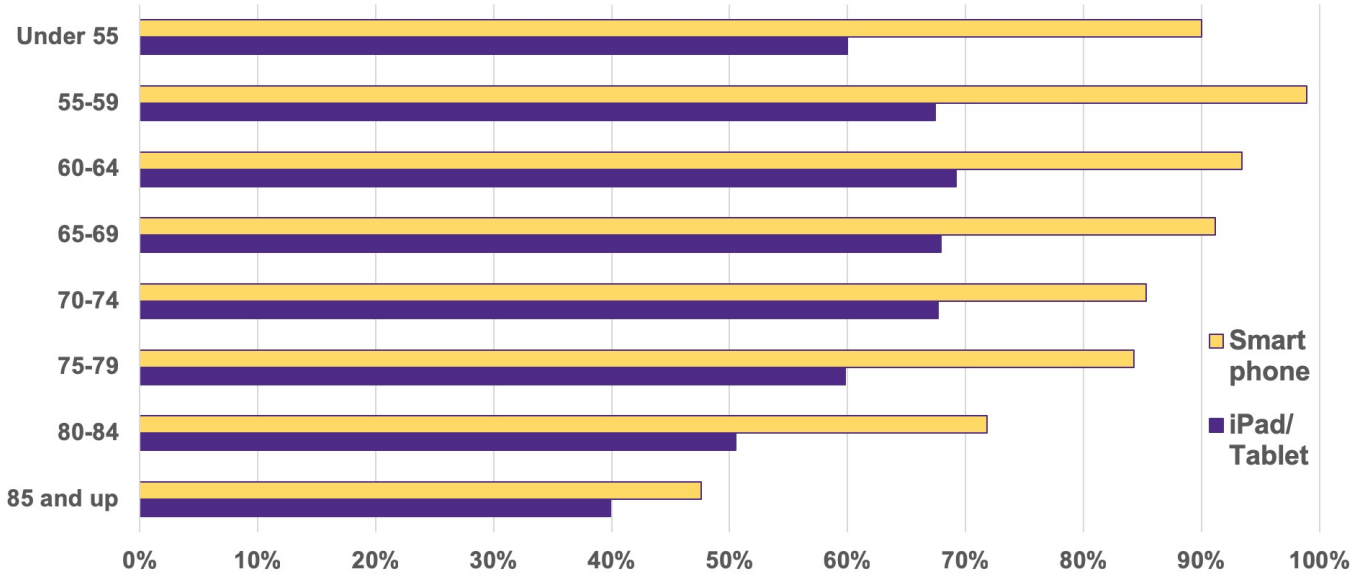

FIG. 9: Women and Men Using Social Media Platforms

(percent of participants)

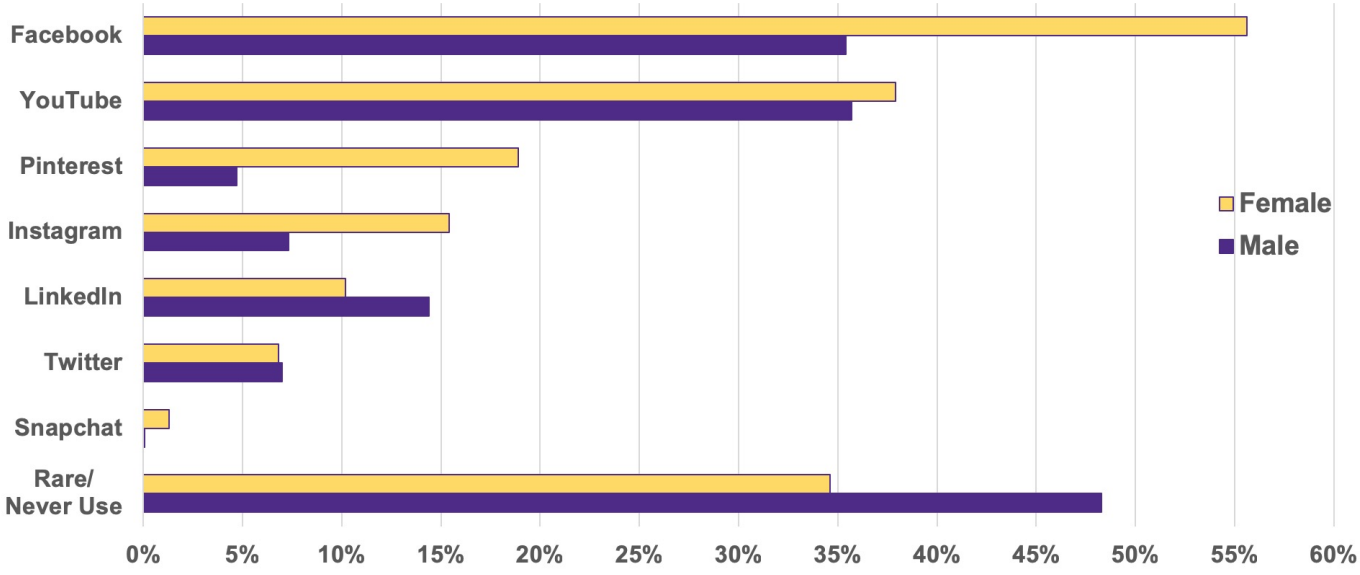

FIG. 10: 8 Program Participants Using Photo/Video Sharing Sites

(percent of participants)

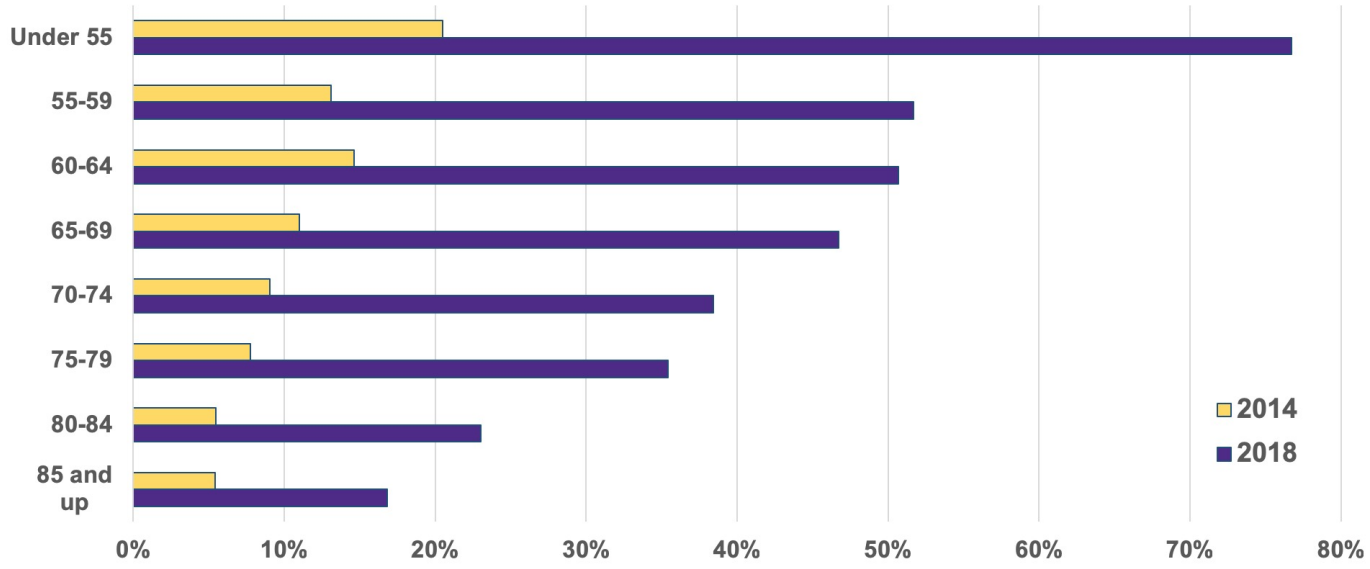

FIG. 11: Topical Preferences

(percent of participants)

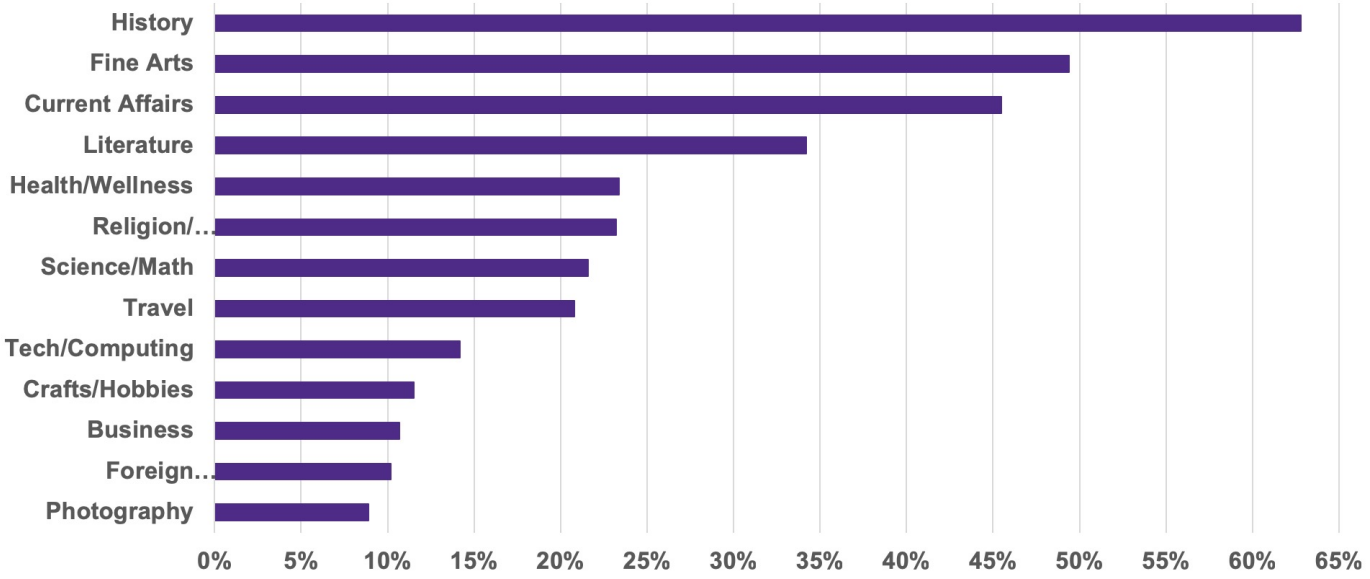

FIG. 12: Topic Preferences by Gender
(percent of each gender)

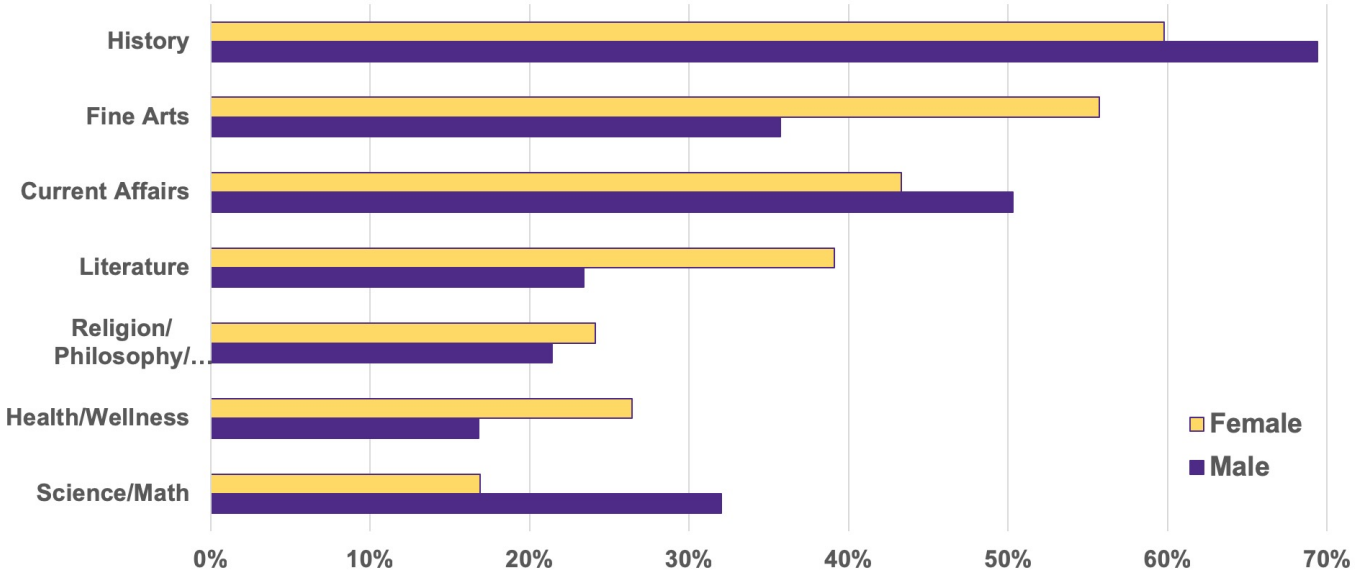

FIG. 13: "Happy" or "Very Happy" Participants with Social Relationships/Friendships
(percent of participants)

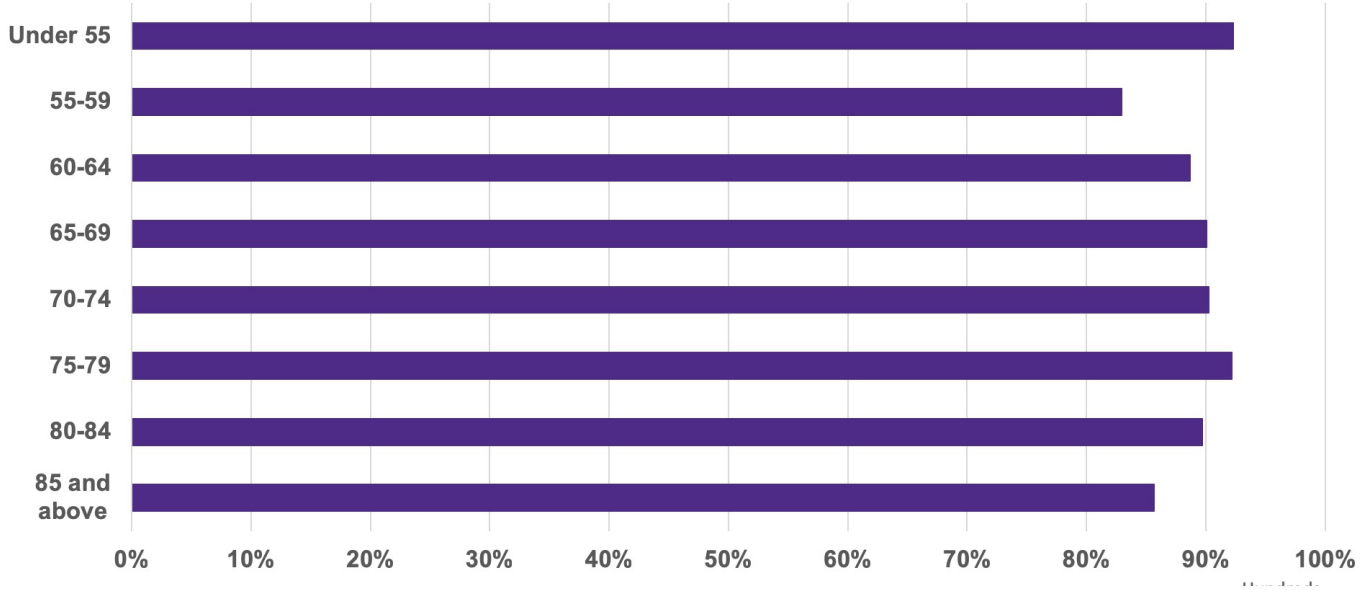

FIG. 14: "Happy" or "Very Happy" Participants with Social Relationships/Friendships Indicating Barriers to OLLI Participation

(percent of participants)