Assessing Participant Satisfaction and the Impact of Senior Centers in Rural Northwestern Ohio Counties

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Recreation

Transportation

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Meals

Recreation

Transportation

Supportive Services

Why haven’t you invited a friend to the center?

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Why haven’t you invited a friend to the center?

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ABSTRACT

This study assessed satisfaction among current senior center users in the Northwestern Ohio area, and measured the impact that centers have on the lives of participants. Specifically, it assessed satisfaction with four services: congregate meals, recreation/activities, transportation, and supportive services. The impact of the centers assesses an important aspect of senior center experiences that cannot be fully captured by measuring satisfaction alone. Impact evaluated the extent to which the senior center affected various aspects of participants’ lives, including things like more social contact, better physical health, and less concern or worry. The primary research questions addressed in this study were: 1) How satisfied are participants with individual services provided by the senior centers?, and 2) To what extent have these centers made an impact on the health and well-being of users?

The results of the study suggest that participants were very satisfied with their senior centers overall, with an average overall satisfaction score of about 95%. Across each of the four services, satisfaction ranged from about 95% to 97%. Satisfaction scores were also calculated using a method that separated responses where participants indicated that they were certain about their satisfaction. Using that method, overall satisfaction was around 83%, with a range from about 81% to 87%.

Similar to satisfaction, two scores of impact were calculated: those who said that their center had made an impact in a given area of their life, and those who reported certainty about that impact. A list of 20 total items were included as possibilities. The mean number identified was 12.9 overall, with about 9.1 items identified for certain by respondents.

Differences by county, demographic factors, health, experiences, and several other items were also assessed and reported. In addition, several open-ended questions were asked, and the qualitative analyses (and direct quotes) are provided. Implications of the findings are also suggested and discussed.
STUDY OVERVIEW

This study was designed to assess customer satisfaction among current senior center users, as well as measure the impact the centers have had on the lives of participants. Specifically, it assessed satisfaction with four services (congregate meals, recreation, transportation, and supportive services) offered at eight primarily rural counties in Northwestern Ohio, including Defiance, Erie, Henry, Ottawa, Paulding, Sandusky, Williams, and Wood. Understanding satisfaction is particularly important for current and future program planning, as well as allocating resources. Research suggests that the costs (time, money, resources) of keeping current participants is five times less than reaching out to new members (Naumann, 1995). In this case, understanding and then enhancing the quality of services and satisfaction levels among current participants is imperative to each center and the Area Office on Aging of Northwestern Ohio, Inc. (AOoA). Understanding satisfaction will allow the centers to better meet the needs of their users, and will potentially allow for identification of “model centers” where satisfaction is very high. Other centers in the area could study practices at model centers to improve their own user experiences.

Participants’ experiences with their senior center cannot be fully captured by assessing satisfaction alone. Senior centers affect the lives of the people they serve in many ways (e.g., more social contact, better physical health, less concern and worry) that could not be assessed by simply asking how satisfied they are with specific services. This study also attempted to capture some of the ways the centers impact their users. This study assessed center impact in nine counties in the AOoA’s area: the eight counties previously listed, in addition to Fulton County. The primary research questions addressed in this study were: 1) How satisfied are participants with individual services provided by the AOoA of Northwestern Ohio via the senior centers? and 2) To what extent have these services made an impact on the health and well-being of service users?

To address these research questions, a questionnaire was adapted from a previous study funded by the AOoA (Vivoda & McGuire, 2017), and administered. The satisfaction level of senior center participants was analyzed overall, by four key services (congregate meals, recreation, transportation, and supportive services), and by county. The overall impact of the centers on the lives of participants was also assessed, as was the relationship between many of these factors.
BACKGROUND

Senior centers play a vital role in supporting older adults in the community. Over the past 50 years, senior centers have grown across the nation into 11,000 facilities reaching over 1 million older adults each day (National Council on Aging, 2018). Senior centers originated from a need in communities to support older adults, specifically those who were thought to be isolated or at risk (Rill, 2011). In 1965 this need was recognized by the federal government and the Older Americans Act (OAA) was passed to help provide supports and services to the growing population of aging adults in America. Today, senior centers seek to serve older adults from all backgrounds with different needs. This is done by offering various kinds of services such as congregate meals, recreational activities, transportation services, and other supportive services, although this may vary depending on the center (Rill, 2011).

The OAA allocates funding to Area Agencies on Aging (AAA) which are organizations that oversee regions within a state. For example, the state of Ohio has 12 AAAs for a total population of about 11.6 million people (United States Census Bureau, 2017), and each agency is responsible for roughly 4-10 counties within a region (Ohio Association of Area Agencies on Aging, 2010). Area Agencies on Aging typically use the funding provided by the OAA to fund other organizations, such as senior centers, to directly provide services for older adults. In addition, senior centers may be funded through a variety of other sources such as state funds, local tax levies, grants, or their own fundraising and donations (National Council on Aging, 2018; Pardasani & Thompson, 2012; Payne, Applebaum, & Straker, 2012, Rill, 2011).

NORTHWESTERN OHIO

The AOOA is responsible for overseeing 10 counties in the Northwestern Ohio area. The AOOA’s mission is to “promote the health, well-being, and safety of older adults, persons with disabilities, and family caregivers to foster independence” (Area Office on Aging of Northwestern Ohio [AOoA], 2014). Their core values include providing compassionate care, strengthening collaboration, improving communication, promoting mutual respect, and embracing diversity. (AOoA, 2014). The AOoA hosts several services for older Ohio residents, including the PASSPORT program, the Family Caregiver Support Program, Housing Program, Senior Farmers’ Market Nutrition Program, and several others (AOoA, 2018). The 2010 U.S. Census estimated over 180,000 adults aged 60 and over live in Northwestern Ohio, and each year the AOoA serves 40,000 older Ohio residents through their programs and services (AOoA, 2014; AOoA, 2018).

Senior centers serve as an essential component of this mission to help older adults improve and maintain their quality of life. Each county assessed in the current study contains between one and seven senior centers, with varying population sizes of older adults.
Rural versus urban senior centers

Research has shown that senior center participation tends to be higher for individuals in rural compared to urban areas (Pardasani, 2010; Casteel, Nocera, & Runyan, 2013). However, more services are often available to users in urban areas (Krout 1987; Turner, 2004). The most notable difference in available services is related to health care needs. For example, Casteel et al. (2013) found that urban senior centers were more likely to offer vision and hearing screenings and glucose testing compared to rural centers. In addition, previous research has noted that objective health measures were worse for older adults living in rural areas, while their self-reported health measures were not different from their urban-dwelling counterparts (Clark & Dellasega, 1998). Despite some of these differences, there is little knowledge on how satisfaction with services or senior center impact may differ between senior centers situated in urban versus rural areas.

SATISFACTION WITH SERVICES

The following subsections describe the major categories of services that were addressed in this study: congregate meals, recreational activities, transportation services, and supportive services.

Congregate meals

One of the goals in the AOoA’s 2015-2018 strategic plan is to “use nutrition, wellness and prevention activities to reduce the incidence or impact of disabilities resulting from preventable chronic diseases” (Area Office on Aging of Northwestern Ohio, 2014). One of the strategies to meet this goal is to provide nutrition services to those who qualify. In 2016, the AOoA and its providers served 819,470 meals to homebound older adults and over a million meals to older adults across the region (Area Office on Aging of Northwestern Ohio, 2014; Area Office on Aging of Northwestern Ohio, 2018). They also provided over $880,000 in coupons to over 19,000 older adults to buy fresh fruits and vegetables from the Senior Farmers’ Market program (Area Office on Aging of Northwestern Ohio, 2016).

A focal point of many senior centers are the congregate meals offered to their attendees, which allows seniors to have a nutritious meal as well as socialization time with others (Dalsanto, 2009). Research shows that many senior center attendees regard these meals as a source of nutrition to which they would otherwise not have access (Dalsanto, 2009).

Recreational activities

Recreational activities play an important role in socialization for many older adults (Turner, 2004). As more and more baby boomers retire they are showing a greater interest than previous generations to be involved in their communities and in civic engagement (MaloneBeach & Langeland, 2011). Senior centers have a wide range of recreational activities to try and accommodate the needs of diverse members, however, every senior center will not have the same
activities as the next (Krout, 1985). Some centers may offer physical or exercise activities such as group yoga, Tai Chi, or an exercise room for independent use. Other recreational activities may include table or card games, artistic endeavors such as painting, quilting or woodworking, and social activities such as holiday parties or outings to concerts, baseball games, or other destinations (Pardasani, 2010; Turner, 2004; Gelfand, Bechill, & Chester, 1991).

**Transportation services**

Ohio spent nearly $15 million on transportation services in 2016 (Administration for Community Living, 2016). Transportation services typically include rides to medical or therapy appointments, the grocery store, to and from the senior center, and other destinations. While many older adults continue driving after age 60, they may begin to limit their driving habits to stay close to home or to avoid risky situations such as bad weather or driving at night (Rahman, Strawderman, Adams-Price, & Turner, 2016; Naumann, Dellinger, & Kresnow, 2011). Transportation services ensure older members of the community a way to safely get to needed medical appointments and other errands. At a national level in 2012, over 22 million rides were provided to seniors traveling to medical appointments, grocery trips, and other destinations (Administration for Community Living, 2017). In 2016, the AOoA provided transportation to over 11,000 medical appointments alone (Area Office on Aging of Northwestern Ohio, 2016).

**Supportive services**

Supportive services may vary from center to center. These services may include legal consultation and assistance, health screening services, disease self-management programs, information about government programs such as Medicare or Medicaid, educational opportunities, and other information and referral services (Turner, 2004; Pardasani & Thompson, 2012; Vivoda & McGuire, 2017). A study done by Turner (2004) across 27 senior centers showed that among participants who utilized differing supportive services 61% learned about power of attorney, 63% learned about living wills, and 55% learned about Medicare services (Turner, 2004). For the purposes of this study, supportive services were defined as help filling out official documents, such as applications for SNAP (Supplemental Nutrition Assistance Program), also known as food stamps; help with utilities; help with taxes, Medicare, Medicaid, or prescription drugs. These resources align with the purpose of senior centers to help foster independence in older adults, improve quality of life, and help them to age in place (Pardasani & Thompson, 2012).

**IMPACT**

The ways in which an older adult is influenced by attending a senior center cannot be fully captured by only measuring satisfaction. The friendships that are made, increases in physical activity, better nutrition, reduced worry about problems, and feeling more independent are all factors that would be missed by simply measuring satisfaction with services. Hence, aside from assessing satisfaction, this study also attempted to quantify some of these factors, to determine if
services offered by senior centers administered by the AOoA have had an impact. Questions measuring impact were adapted from a toolkit developed by the Florida Department of Elder Affairs (Florida Department of Elder Affairs [DOEA], 2010), as well as from input provided by the AOoA and senior center staff.

**METHODS**

**SAMPLING**

A list of all senior center participants during the past year was generated by the AOoA for the nine counties of interest. The list was checked for duplicate participants, based on name and address, and then again based on name and phone number. Duplicate entries were removed, and the lists were separated by county.

One of the goals of the project was to assess satisfaction by county, so the sample was drawn using each of the county senior center populations as separate sampling frames. This method allowed for satisfaction levels to be calculated overall, within each of the four services of interest, and separately by county. To determine the necessary number of participants required, a power analysis was conducted within each of the frames. The estimated level of satisfaction used in the power analysis was based on previous research assessing satisfaction with senior center services and the Lucas County study conducted in 2017 (Vivoda & McGuire, 2017). That recent study informed expected rates of non-response. To adjust for the oversampling created by this method, weights were calculated based on the number of respondents actually interviewed within each center (i.e., the final sample) and the total from the original sampling frames that each individual represented.

**QUESTIONNAIRE DESIGN**

The questionnaire used for the Lucas County study was assessed and adapted for this project. The items were reviewed by the researchers, as well as AOoA and senior center staff. Adjustments were made to ensure that the questions reflected the services and activities available in senior centers within the counties of interest.

A change was also made to the response categories used with most questions. Satisfaction and impact were assessed in the Lucas County study using primarily yes/no responses for all items. During initial questionnaire development for the Lucas County study, a Likert-type scale was assessed that ranged from 1 to 5. Testing revealed that respondents may have trouble remembering and responding to that scale over the phone, so the yes/no response set was adapted instead (Vivoda & McGuire, 2017). Given the very high levels of satisfaction measured in that study, however, those response categories do not result in much variance in the primary outcome of interest. To address the lack of variance, but still provide a scale that respondents could remember, research that had been used in studying satisfaction in long-term care settings (e.g., Chow et al., 2017) was
adapted for the current study. Specifically, the response categories were changed from yes/no, to definitely yes, probably yes, probably no, and definitely no.

The final version of the questionnaire contained about 100 items and took around 20 to 25 minutes to complete. Topics covered on the questionnaire included satisfaction about all facets of the services of interest (congregate meals, recreation, transportation, supportive services), as well as an assessment of the outcome/impact of the centers, loneliness, self-rated health, demographics, driving status, experiences growing older, and amount of financial struggle.

**DATA COLLECTION**

Data collection occurred between February and May 2018. Calls were made by two graduate and four undergraduate students at Miami University. The data were entered by the callers into a custom-designed form using Qualtrics software. The system allowed for skip-patterns and response choices to be automatically employed, which reduced burden on the data collectors and ensured more accurate data. Before the calling period began, callers were trained, practiced making calls, and were assessed by a member of the project team.

Data collection for Fulton County used a different mode and modified questionnaire. To reduce respondent burden related to another recent survey conducted with Fulton’s senior center participants, and to streamline information for center administrators in that county, questions related to satisfaction with services were excluded, with the primary focus on center impact. Data were collected in April 2018 in-person by AOoA staff (after completion of a remote training session on data collection), on two separate days. A sampling frame for Fulton County was created in the same way as for the other counties. To increase the chances of interviewing respondents contained within the sampling frame, a notification about the time and location for data collection was sent out to those participants ahead of time, using the center’s emergency phone system. During data collection, however, any respondent willing to participate was included, and the anonymous nature of the questionnaire does not allow for matching respondents to those randomly selected.

To increase the response rate, a letter was sent from the AOoA to each respondent listed in the original county samples. A description of the study, the telephone number that would show up on respondents’ caller-ID, and the name of the callers were included in the letter. Letters were also sent to Fulton County participants, listing the days when staff would be at the center. Five telephone call attempts were made to contact each respondent, with attempts made on different days of the week and at different times of the day. If respondents suggested a call-back at a specific time, every attempt was made to accommodate that request. If a respondent said that they did not want to participate in the survey, they were asked if they would consider filling out the survey online instead, at their convenience. Ten respondents completed the questionnaire that way. If they still said that they did not want to participate, they were asked if they would consider answering just one question. Upon consent, they were asked “Overall, are you satisfied with your senior
center?” Two-hundred and eighty-one respondents who initially refused to participate agreed to answer that single question, and a total of 319 respondents answered at least some of the individual satisfaction questions. A total of 600 people responded to the survey in some way, with an additional 24 interviewed in-person in Fulton County.

According to the Pew Research Center (2017), typical response rates for a standard telephone interview today are about 9%, but that does not necessarily mean that the information collected is biased. The response rate for the current study varies, depending upon how it is calculated. We expected the response rate to be higher than 9%, given that the individuals we were calling had used their senior center, and we were not conducting “cold calls.” Likewise, we expected that the contact information provided by respondents to the senior center (and subsequently to the AOoA and to the project team), would be accurate, which would lead to an accurate sampling frame and reduce the number of attempts we would have to make for a call completion. Unfortunately, one problem we encountered was invalid information in the sampling frame. Originally, 1,770 total individuals were drawn from the sampling frame. A review of the response rate at the midpoint of data collection suggested lower numbers than anticipated, so that number was increased to 2,478. Unfortunately, the information we had for 601 of them was invalid (e.g., telephone number not in service; they never attended the senior centers). Given that, the number we could contact with valid information was 1,877. As noted earlier, a total of 600 people responded to the survey in some way, for an overall response rate of 32.0%. If only the people who responded to the full survey are considered (i.e., those who only answered the single satisfaction item are excluded), the response rate was 17.0%.

To ensure that satisfaction about a given activity was assessed among only those who could accurately consider it, each satisfaction item was preceded by two questions, asking if their center provided that activity, and if they had participated in it within the past year. In other words, a respondent was only asked about their satisfaction with a given activity if they had actually participated in that activity during the past year.

**MEASURES**

**Satisfaction**

* Satisfaction was assessed by asking respondents whether or not they were satisfied with all facets of each of the four services of interest: congregate meals, recreation, transportation, and supportive services. The response categories included *definitely yes*, *probably yes*, *probably no*, and *definitely no*. Within each of the services, total scores were created in two ways. First, *definitely yes* and *probably yes* were combined together, as were *definitely no* and *probably no*. These were then averaged across all respondents, representing the percentage of people who were satisfied at all. The resulting score is comparable to the yes/no responses used in the Lucas County study (Vivoda & McGuire, 2017). Another score was created that represented only those who said *definitely yes*, in response to the items. *Probably yes*, *probably no*, and *definitely no* were all
combined together. That score represents those who were certain of their satisfaction with a given service.

Total composite scores of satisfaction were created using each of the two methods (yes/no and definitely yes) by averaging responses for ALL satisfaction items across all four services. Satisfaction was also calculated within each county, by averaging scores for each county only. The final satisfaction scores were adjusted using the weights described earlier, to more accurately represent the overall population served by senior centers in the AOoA’s region.

At the end of each section about the four senior center services of interest, respondents were also asked “if you could change one thing about the … provided by the center, what would it be?” Meals, recreational activities, transportation, and supportive services were inserted into this open-ended question.

**Impact**

The impact that each center has had on the lives of participants was assessed using a series of questions adapted from the Senior Center Evaluation Toolkit (developed by the DOEA, 2010), other existing literature, and input from the AOoA and center staff. Respondents were first told that “the next questions are about your life since you started attending the senior center. I’m going to read you several statements. If a statement is true for you, please say yes. If it is not true for you, please say no. Because you go to the senior center, you…” This statement was followed by the actual items, which included the following: do more volunteer work; see friends more often; have made new friends; my health has improved; eat meals that are better for you; have more energy; feel happier or more satisfied with your life; have something to look forward to; know where to get help if you need service, such as a ride to the doctor; feel more independent; have experienced positive changes in your life; have learned new things; worry less about problems that may come up; are more physically active; feel more engaged in your community; feel more in control of your life; feel more socially connected; gained knowledge on active aging trends; feel like my mind is more active; and have received support for caring for my spouse/partner/friend. The response choices included definitely yes, probably yes, probably no, and definitely no. Once again, two composite variables were created by combining the yes responses to compare with the no responses, and then using only the definitely yes responses. Once the recodes were complete, these composite variables were calculated by summing across the individual impact items.

**Other factors of interest**

*Participation in the senior center* was assessed several ways. First, longevity with their center was assessed by asking how long respondents have been going to their senior center. Response choices were: in the past month (coded as 1), in the past three months (coded as 2), in the past six months (3), in the past year (4), in the past three years (5), and more than three years ago (6). Next, respondents were asked when the last time was that they went to the center. Choices were: within the last week (1), within the last month (2), within the last three months (3), and more
than three months ago (4). The next item assessed frequency of attendance. Respondents were asked how often they go to the senior center, with choices of every day (1), more than once a week (2), once a week (3), one to three times per month (4), every few months (5), and one time each year (6). Finally, respondents were asked if they have ever invited a friend to go to the senior center with them. Those who responded that they have not, were also asked why, using an open-ended question format.

Loneliness was operationalized by adapting a measure used in the 2004 wave of the (Health and Retirement Study [HRS], 2016). To reduce respondent burden, several of those items were removed from the current questionnaire. Respondents were first told that: “The next few questions ask how you feel about different aspects of your life in general. How much of the time do you feel…?” Each loneliness item was added to that stem, including the following: that you lack companionship, left out, isolated from others, that there are people you can talk to, that there are people who really understand you, that there are people you feel close to, part of a group of friends, and that you have a lot in common with the people around you. Response categories were: often, some of the time, and hardly ever or never. A combined score for loneliness was created by first coding often (1), some of the time (2), and hardly ever or never (3), such that a higher number represented less frequent experiences with loneliness. Those scores were then summed to create a total loneliness score.

Self-rated health was assessed by asking respondents “Would you say your health is excellent, very good, good, fair, or poor?” Responses were coded from one to five with a higher number representing better health. Current physical activity and lifetime activity level were also assessed. Both of these factors were assessed using a scale from one to five, where one is not at all active and five is very active. For current physical activity, respondents were asked “How physically active would you say you are now?,” while lifetime activity level was assessed by asking respondents to “Think back about your experiences with physical activity and exercise throughout your entire life” and identify your level of physical activity overall using the same one to five scale.

Several demographic factors were also assessed. The gender of each respondent was determined using the data provided by the AOoA. Age was operationalized by asking respondents “What is your current age?” Education was assessed using the following open-ended question: “What is the highest grade of school you have completed, or the highest degree you have received?” Responses were categorized into less than high school, high school, some college, college degree, and advanced degree. Respondents who stated that they completed no-degree credentials such as trade school, certifications, or two-year degrees were also placed in the some college category.

Respondents’ race was determined by asking whether they considered themselves to be White, Black/African American, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, or something else. More than one category was marked for respondents who consider
themselves multiracial. In a separate question, respondents were asked whether or not they consider themselves to be Hispanic or Latino.

Several questions assessed respondents’ current driving status. These items were adapted from the National Health and Aging Trends Study (NHATS; Kasper & Freedman, 2017). Respondents were asked “Do you currently drive yourself places when you need to?” and “When was the last time you drove?” The response categories for the latter item included: within the last week, within the last month, within the last three months, and longer than three months ago. Finally, respondents were asked whether they ever avoid driving at night, on busy roads, or in bad weather.

The aging experience of respondents was also assessed in this study. First, people were asked “On the whole, would you say that growing older has been a very positive experience (1), mainly positive experience (2), neither a positive nor a negative experience (3), mainly negative experience (4), or a very negative experience (5). Next, respondents were asked to respond yes or no to items using the following stem: “Now that I am older, I…” with items including have less stress in my life, feel less healthy, feel more respected, feel less needed by others, have more time to do the things I want to do, and feel like my relationships with others have gotten better. These items were adapted from the Health and Retirement Study (HRS, 2016). A composite variable was created using these items, such that a higher number represented a worse experience with aging.

Finally, financial difficulty was assessed by asking respondents to report how difficult it is for them to meet monthly payments on their bills. Response choices included not at all difficult (coded as 1), not very difficult (coded as 2), somewhat difficult (3), very difficult (4), and completely difficult (5).

**Participants**

As noted earlier, a total of 624 people responded to the survey in some way. The unweighted number and weighted percentage of respondents who participated in each of the four activities of interest were calculated. Congregate meals had 206 participants (73.9%) and recreation had 143 (54.9%), while transportation had 48 (19.9%) and supportive services had 45 (24.6%). The average number (of the four services) engaged in by each respondent was 1.55 (1.51 weighted), with a maximum of four. Most respondents (106) used only two services, followed closely by those who used only one (90).

The average age of respondents was 76.4 years old, and 70.5% (233) were female. In terms of education, the largest group reported having finished high school (135, 48.5%), followed by some college (60, 22.0%), having a college degree (44, 15.9%), less than high school (19, 6.7%), and holding an advanced degree (18, 7.0%). The majority of respondents identified themselves as White (274, 98.6%), with very few individuals identifying as any other racial group, or as multiracial. Only three respondents identified their ethnicity as Hispanic/Latino.
**DATA MANAGEMENT AND ANALYSIS PROCEDURES**

Statistical analyses were performed using Statistical Analysis System (SAS) software version 9.4. Each variable was individually assessed for potential errors by ensuring no out-of-range errors existed, and for missing values. Means, frequencies, and the distribution of each variable were calculated as appropriate, given each variable type. The unweighted and weighted mean of each continuous variable was calculated, as was the (un)weighted frequency of each categorical variable.

Bivariate analyses were also conducted using analysis of variance tests (ANOVA), independent samples t-tests, Pearson product-moment correlations, and chi-square tests, as appropriate, given the nature of the variables being assessed. Finally, multivariable analyses were conducted to assess the independent influence of each predictor of interest on overall satisfaction scores and separately on the impact of the senior centers. Linear regression techniques were used for the satisfaction analysis, while negative binomial regression was used to assess which factors were related to the impact of the centers.
RESULTS

Satisfaction

Satisfaction was assessed overall across eight of the counties measured in this study, as well as within each county. Weighted averages were calculated to adjust for the oversampling described earlier. All results presented in this report are weighted unless otherwise noted. Separate satisfaction levels were calculated using the individual satisfaction questions, the respondents who agreed to answer one question only, and a combination of both. In addition, all measures of satisfaction were calculated separately using the yes/no method and the definitely yes method described earlier.

The relationships between satisfaction and several other factors were also assessed. Those relationships could only be assessed using the satisfaction rating calculated with the full questionnaire respondents, since the other variables were not available for those who only answered the single question.

Overall satisfaction

As shown in Table 1 and Figure 1, overall satisfaction was very high using any of the metrics and approaches previously described. The table and figure both contain essentially the same information (the mean and 95% confidence interval). They are both presented because the table includes additional information (n, sd, min, and max), while the figure illustrates the data in a way that may be easier to understand and compare. Using the yes/no method, respondents reported satisfaction levels around 95%, and there was no difference between those who responded to the full survey and those who only answered one question. The definitely yes method showed more variation in satisfaction, as well as a significantly lower satisfaction rating for those who only answered one question, compared to those who agreed to complete the full survey. This suggests that there was less certainty about satisfaction among those who only answered that single item.

Table 1. Overall Satisfaction

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>n</th>
<th>Mean</th>
<th>sd</th>
<th>Min</th>
<th>Max</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction (yes/no)</td>
<td>238</td>
<td>.956</td>
<td>.597</td>
<td>.294</td>
<td>1.00</td>
<td>(.942 - .971)</td>
</tr>
<tr>
<td>Satisfaction 1Q only (yes/no)</td>
<td>281</td>
<td>.952</td>
<td>1.194</td>
<td>.000</td>
<td>1.00</td>
<td>(.927 - .977)</td>
</tr>
<tr>
<td>Satisfaction combined (yes/no)</td>
<td>519</td>
<td>.954</td>
<td>.680</td>
<td>.000</td>
<td>1.00</td>
<td>(.939 - .970)</td>
</tr>
<tr>
<td>Satisfaction (def yes)</td>
<td>238</td>
<td>.826</td>
<td>1.329</td>
<td>.000</td>
<td>1.00</td>
<td>(.794 - .858)</td>
</tr>
<tr>
<td>Satisfaction 1Q only (def yes)</td>
<td>281</td>
<td>.722</td>
<td>2.507</td>
<td>.000</td>
<td>1.00</td>
<td>(.669 - .774)</td>
</tr>
<tr>
<td>Satisfaction combined (def yes)</td>
<td>519</td>
<td>.771</td>
<td>1.452</td>
<td>.000</td>
<td>1.00</td>
<td>(.739 - .803)</td>
</tr>
</tbody>
</table>

Note. n = sample size; sd = standard deviation; min = minimum; max = maximum; CI = Confidence interval; 1Q = respondents who only agreed to answer one question; def yes = definitely yes
Figure 1. Overall Satisfaction

As shown in Table 2 and Figure 2, satisfaction was also very high for each of the four services of interest. It ranged from 96.7% for transportation to 95.0% for congregate meals. Among those who were certain about their satisfaction, supportive services had the highest rating (86.7%), with congregate meals the lowest, at 80.7%. It should also be noted that these calculations are based on different numbers of respondents, given that questions about satisfaction were only asked of those who had participated in the activity. As described earlier, many more respondents participated in congregate meals and recreation than in transportation and supportive services.

Table 2. Satisfaction by Service

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>n</th>
<th>Mean</th>
<th>sd</th>
<th>Min</th>
<th>Max</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congregate meals (yes/no)</td>
<td>204</td>
<td>.95</td>
<td>.681</td>
<td>.200</td>
<td>1.00</td>
<td>(.933 - .967)</td>
</tr>
<tr>
<td>Recreation (yes/no)</td>
<td>142</td>
<td>.966</td>
<td>.633</td>
<td>.429</td>
<td>1.00</td>
<td>(.946 - .985)</td>
</tr>
<tr>
<td>Transportation (yes/no)</td>
<td>47</td>
<td>.967</td>
<td>.920</td>
<td>.000</td>
<td>1.00</td>
<td>(.915 - 1.00)</td>
</tr>
<tr>
<td>Supportive services (yes/no)</td>
<td>45</td>
<td>.962</td>
<td>1.054</td>
<td>.000</td>
<td>1.00</td>
<td>(.904 - 1.00)</td>
</tr>
<tr>
<td>Congregate meals (def yes)</td>
<td>204</td>
<td>.807</td>
<td>1.437</td>
<td>.000</td>
<td>1.00</td>
<td>(.771 - .843)</td>
</tr>
<tr>
<td>Recreation (def yes)</td>
<td>142</td>
<td>.855</td>
<td>1.465</td>
<td>.000</td>
<td>1.00</td>
<td>(.809 - .900)</td>
</tr>
<tr>
<td>Transportation (def yes)</td>
<td>47</td>
<td>.836</td>
<td>1.916</td>
<td>.000</td>
<td>1.00</td>
<td>(.726 - .946)</td>
</tr>
<tr>
<td>Supportive services (def yes)</td>
<td>45</td>
<td>.867</td>
<td>1.355</td>
<td>.000</td>
<td>1.00</td>
<td>(.793 - .941)</td>
</tr>
</tbody>
</table>

Note: n = sample size; sd = standard deviation; min = minimum; max = maximum; CI = Confidence interval; 1Q = respondents who only agreed to answer one question; def yes = definitely yes
Suggestions for improvement

Respondents were given the opportunity to identify one key area for improvement within each of the centers’ four services, via an open-ended question at the end of each section. Responses were analyzed to identify major themes for suggested improvements within each service. Many respondents had no suggestions for improvement, which echoes the high levels of satisfaction found in the quantitative analyses. The identified themes for each service and the proportion of responses related to each theme are provided below.

Congregate meals

The first open-ended item respondents were asked was “If you could change one thing about the meals provided by the center, what would it be?” After assessing the data, it was evident that the majority of the answers include “Nothing,” “I wouldn't change a thing,” “I don't know,” etc. This is classified as Theme 1 (see Figure 3). Other answers suggested adding certain items to the menu (e.g., fish, meat, hamburgers, etc.), and are classified as Theme 2. Adding more vegetables, vegan, vegetarian options, as well as salads, fruits, salad bar, are identified as Theme 3. There were also comments on how food is cooked, how food is served, and when meals are eaten, which is shown as Theme 4. Comments on variety of foods in the menu, having bigger (or lesser) portions, having more food, etc. are classified as Theme 5. Comments on starch-related items such as carbs, pasta, other starchy foods, are classified as Theme 6. The last classification, Theme 7, involved other miscellaneous comments such as those on food taste, cooks (people
preparing the foods), desserts, menu selection, etc. Figure 3 shows the identified themes and number of responses for Question 11 (Q11) of the survey. There was one missing/no response to Q11.

**Figure 3. Qualitative Analysis – Congregate Meals**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1</td>
<td>89</td>
<td>Nothing; It's perfect; I don't know; I wouldn't change a thing</td>
</tr>
<tr>
<td>Theme 2</td>
<td>7</td>
<td>Comments on fish/meat foods, hamburgers, etc.</td>
</tr>
<tr>
<td>Theme 3</td>
<td>6</td>
<td>More vegetables, vegan, vegetarian options, salads, fruits; more days on salad bar, etc.</td>
</tr>
<tr>
<td>Theme 4</td>
<td>16</td>
<td>Changes on how food is cooked/how food is served/when food is eaten (scheduling)</td>
</tr>
<tr>
<td>Theme 5</td>
<td>23</td>
<td>More variety on foods; more/bigger portions; more food; other comments on portions (make them less, etc.)</td>
</tr>
<tr>
<td>Theme 6</td>
<td>6</td>
<td>Comments on starch, carbs, pasta, etc.</td>
</tr>
<tr>
<td>Theme 7</td>
<td>16</td>
<td>Miscellaneous menu comments (desserts, taste of food, seasonings, menu selections, etc.)</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>n/a; blank; no answer; missing</td>
</tr>
<tr>
<td>Total</td>
<td>164</td>
<td></td>
</tr>
</tbody>
</table>

"If you could change one thing about the meals provided by the center, what would it be?"
Recreation

Following the questions about recreation, respondents were asked “Now I would like you to think about your overall experience participating in recreational activities at the center, not just fitness classes. If you could change one thing about the recreational activities provided by the center, what would it be?” Again, the majority of respondents either did not want anything to change or did not participate much, if at all, to know what they wanted to change (e.g., “I don't know,” “I don't participate much so I don't know,” “They don't fit my interests,” “No opinion on change,” “No suggestions” (indifferent). These items are classified as Theme 1 and Theme 1* (see Figure 4), respectively. Responses on wishing for more classes (e.g., “Offer a class for people,” “More classes in general,” “Classes for different age groups,” etc.) are classified as Theme 2. Comments on scheduling, timing, location (e.g., “More outdoor stuff”), transportation to/from the center, are classified as Theme 3. Responses asking for more variety of exercises, card games, suggestions of specific exercise activities, are classified as Theme 4. Comments on more involvement, community outreach, etc. are combined as Theme 5. Equipment-related comments (e.g., more equipment, better equipment, etc.) are Theme 6. Other miscellaneous comments (e.g., “Manager too old,” Not willing to pay for services, more music, more evening meals, entertainment, etc.) are shown as Theme 7. Based on number of responses, the order of categories are: Theme 1 (70), Theme 1* (49), Theme 3 (16), Theme 4 (14), Theme 7 (14), Missing/No Response (11), Theme 2 (10), Theme 5 (8), Theme 6 (6).

Figure 4. Qualitative Analysis – Recreation

“Now I would like you to think about your overall experience participating in recreational activities at the center, not just fitness classes. If you could change one thing about the recreational activities provided by the center, what would it be?”
<table>
<thead>
<tr>
<th>Theme</th>
<th>Count</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1</td>
<td>70</td>
<td>Nothing; Can’t think of anything</td>
</tr>
<tr>
<td>Theme 1*</td>
<td>49</td>
<td>I don't know; I don't participate much so I don't know; they don't fit my interests; no opinion on change; no suggestions (indifferent)</td>
</tr>
<tr>
<td>Theme 2</td>
<td>10</td>
<td>Offer a class for people; more classes in general; classes for different age groups</td>
</tr>
<tr>
<td>Theme 3</td>
<td>16</td>
<td>Comments on scheduling; timing; location (more outdoor stuff); transportation to/from the center</td>
</tr>
<tr>
<td>Theme 4</td>
<td>14</td>
<td>More variety; more card games, other Themes of exercises; suggestions of specific exercise activities; etc.</td>
</tr>
<tr>
<td>Theme 5</td>
<td>8</td>
<td>Comments on more involvement; community outreach; etc.</td>
</tr>
<tr>
<td>Theme 6</td>
<td>6</td>
<td>Comments on equipment: more equipment, better equipment, etc.</td>
</tr>
<tr>
<td>Theme 7</td>
<td>14</td>
<td>Miscellaneous (manager too old; not willing to pay for services; more music; more evening meals w/ entertainment; bad quality; better teachers; people can't play certain games; pain interference; less walking; not to bother me)</td>
</tr>
<tr>
<td>Missing</td>
<td>11</td>
<td>n/a; blank; no answer; missing</td>
</tr>
<tr>
<td>Total</td>
<td>198</td>
<td></td>
</tr>
</tbody>
</table>

**Transportation**

Figure 5 shows the themes that resulted from responses to Question 63 (Q63): “If you could change one thing about transportation services provided by the center, what would it be?” There were relatively few types of answers to this question, with only four themes emerging. Most people were satisfied or had no desire for any change, categorized as Theme 1. Others wanted more transportation, more drivers, vehicles, bigger buses, etc., which is labeled Theme 2. Comments on timing/scheduling, weather-related issues, etc. is Theme 3, and miscellaneous comments (e.g., unkind driver, only one driver each time, only use it for activities, etc.) is Theme 4. The order of these themes is: Theme 1 (21), Theme 2 (11), Theme 3 (6), Theme 4 (3), Missing/No Response (0). Figure 5 also presents the proportion of responses to Q63 by theme.
Figure 5. Qualitative Analysis – Transportation

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1</td>
<td>21</td>
<td>Nothing; satisfied; etc.</td>
</tr>
<tr>
<td>Theme 2</td>
<td>11</td>
<td>More transportation, more drivers, more vehicles, bigger bus, etc.</td>
</tr>
<tr>
<td>Theme 3</td>
<td>6</td>
<td>Comments on timing/scheduling, weather-related comments, etc.</td>
</tr>
<tr>
<td>Theme 4</td>
<td>3</td>
<td>Miscellaneous (driver unkind/inconsiderate; only one driver each time; only use it for activities, etc.)</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>n/a; blank; no answer; missing</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td></td>
</tr>
</tbody>
</table>

Supportive services

Respondents were also asked “If you could change one thing about supportive services provided by the center, what would it be?” Figure 6 presents the proportion of responses to Q77 by theme. Only two themes emerged from this analysis (see Figure 6): Theme 1 includes answers such as “Nothing,” “Satisfied,” “Can't think of anything,” and Theme 2 is classified as “other” responses (e.g., adjustment to new leaders, making meetings on time, etc.).
Figure 6. Qualitative Analysis – Supportive Services

<table>
<thead>
<tr>
<th>Theme 1</th>
<th>21</th>
<th>Nothing; satisfied; can't think of anything; I don’t know; no idea; everything good; etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 2</td>
<td>10</td>
<td>Other comments (adjustment to new leaders; make meetings on time; only go for taxes; site manager not great; better meals; more staff)</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>n/a; blank; no answer; missing</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td></td>
</tr>
</tbody>
</table>

**County specific satisfaction**

Satisfaction rates were also calculated by each county. Rates are shown in Table 3, Figure 7, and Figure 8. The table lists counties alphabetically, with the yes/no method results above the definitely yes results. The figures show these results separately and are sorted from highest to lowest satisfaction. As these figures illustrate, satisfaction rates by each individual county were quite high, ranging from about 85% in Erie to nearly 100% in Paulding. The rates are lower for satisfaction certainty, with the highest rate (92.6%) observed in Henry County.

County differences were also assessed separately for the yes/no and definitely yes methods, using one-way analysis of variance tests (ANOVAs). County satisfaction can be compared using the confidence intervals shown in Table 3, Figure 7, and Figure 8. Where the intervals do not overlap between counties, statistically significant differences can be inferred, but that represents a more conservative test than using ANOVAs. The ANOVAs revealed consistent results using both yes/no and definitely yes, with satisfaction in Erie County statistically significantly lower than Defiance, Henry, Ottawa, Paulding, Wood, and Williams.
<table>
<thead>
<tr>
<th>County</th>
<th>n</th>
<th>Mean</th>
<th>sd</th>
<th>Min</th>
<th>Max</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defiance</td>
<td>26</td>
<td>.966</td>
<td>.549</td>
<td>.625</td>
<td>1.000</td>
<td>(.927 - 1.000)</td>
</tr>
<tr>
<td>Erie</td>
<td>14</td>
<td>.852</td>
<td>1.450</td>
<td>.294</td>
<td>1.000</td>
<td>(.733 - .971)</td>
</tr>
<tr>
<td>Henry</td>
<td>46</td>
<td>.983</td>
<td>.342</td>
<td>.500</td>
<td>1.000</td>
<td>(.959 - 1.000)</td>
</tr>
<tr>
<td>Ottawa</td>
<td>25</td>
<td>.965</td>
<td>.460</td>
<td>.600</td>
<td>1.000</td>
<td>(.927 - 1.000)</td>
</tr>
<tr>
<td>Paulding</td>
<td>40</td>
<td>.998</td>
<td>.034</td>
<td>.938</td>
<td>1.000</td>
<td>(.995 - 1.000)</td>
</tr>
<tr>
<td>Sandusky</td>
<td>21</td>
<td>.949</td>
<td>.470</td>
<td>.563</td>
<td>1.000</td>
<td>(.898 - 1.000)</td>
</tr>
<tr>
<td>Williams</td>
<td>28</td>
<td>.956</td>
<td>.593</td>
<td>.600</td>
<td>1.000</td>
<td>(.920 - .993)</td>
</tr>
<tr>
<td>Wood</td>
<td>38</td>
<td>.966</td>
<td>.657</td>
<td>.500</td>
<td>1.000</td>
<td>(.936 - .997)</td>
</tr>
<tr>
<td>Definitely Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defiance</td>
<td>26</td>
<td>.799</td>
<td>1.671</td>
<td>.000</td>
<td>1.000</td>
<td>(.680 - .919)</td>
</tr>
<tr>
<td>Erie</td>
<td>14</td>
<td>.590</td>
<td>2.414</td>
<td>.000</td>
<td>1.000</td>
<td>(.391 - .789)</td>
</tr>
<tr>
<td>Henry</td>
<td>46</td>
<td>.926</td>
<td>.730</td>
<td>.200</td>
<td>1.000</td>
<td>(.875 - .976)</td>
</tr>
<tr>
<td>Ottawa</td>
<td>25</td>
<td>.831</td>
<td>1.107</td>
<td>.300</td>
<td>1.000</td>
<td>(.738 - .923)</td>
</tr>
<tr>
<td>Paulding</td>
<td>40</td>
<td>.926</td>
<td>.433</td>
<td>.538</td>
<td>1.000</td>
<td>(.886 - .966)</td>
</tr>
<tr>
<td>Sandusky</td>
<td>21</td>
<td>.709</td>
<td>1.285</td>
<td>.000</td>
<td>1.000</td>
<td>(.570 - .847)</td>
</tr>
<tr>
<td>Williams</td>
<td>28</td>
<td>.901</td>
<td>.850</td>
<td>.500</td>
<td>1.000</td>
<td>(.849 - .952)</td>
</tr>
<tr>
<td>Wood</td>
<td>38</td>
<td>.831</td>
<td>1.613</td>
<td>.000</td>
<td>1.000</td>
<td>(.758 - .906)</td>
</tr>
</tbody>
</table>

Note. n = sample size; sd = standard deviation; min = minimum; max = maximum; CI = Confidence interval; SC = senior center; 1Q = respondents who only agreed to answer one question.

Figure 7. Satisfaction by County – Yes/No
Impact

In addition to understanding satisfaction, a key aspect of this study was to assess the impact that the senior centers have had on the daily lives of the people they serve. The percentages of respondents who identified each of the impacts studied are shown in Table 4, Figure 9 (yes/no), Table 5, and Figure 10 (definitely yes). Recall that these questions asked respondents to identify which of these were true for them because they go to the senior center. As these results show, the senior centers have had a positive impact on the lives of participants. The highest item chosen suggested that going to the senior center gave them something to look forward to, with 89.6% identifying that factor using the yes/no methodology, while 38.1% of respondents reported doing more volunteer work as a result of their center participation. For items where respondents were certain about the centers’ impact on their lives, knowing where to get help if you need a service was the highest item chosen, with 73.4%. The least chosen item, using the definitely yes method, was the item where people could state that their health has improved, but was still identified by over a quarter of respondents (25.9%).
Table 4. Impact of Senior Center Participation – Yes/No

<table>
<thead>
<tr>
<th>Impact</th>
<th>n</th>
<th>Mean</th>
<th>sd</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have something to look forward to</td>
<td>254</td>
<td>.896</td>
<td>1.702</td>
<td>(.859 - .934)</td>
</tr>
<tr>
<td>Know where to get help if you need a service</td>
<td>252</td>
<td>.869</td>
<td>1.890</td>
<td>(.827 - .911)</td>
</tr>
<tr>
<td>I feel more socially connected</td>
<td>250</td>
<td>.854</td>
<td>1.976</td>
<td>(.810 - .908)</td>
</tr>
<tr>
<td>Feel happier or more satisfied with your life</td>
<td>250</td>
<td>.846</td>
<td>2.018</td>
<td>(.800 - .891)</td>
</tr>
<tr>
<td>Have made new friends</td>
<td>264</td>
<td>.822</td>
<td>2.143</td>
<td>(.775 - .868)</td>
</tr>
<tr>
<td>I have gained knowledge on active aging trends</td>
<td>248</td>
<td>.768</td>
<td>2.358</td>
<td>(.715 - .821)</td>
</tr>
<tr>
<td>I feel like my mind is more active</td>
<td>248</td>
<td>.765</td>
<td>2.360</td>
<td>(.712 - .818)</td>
</tr>
<tr>
<td>Have learned new things</td>
<td>254</td>
<td>.751</td>
<td>2.419</td>
<td>(.697 - .804)</td>
</tr>
<tr>
<td>See friends more often</td>
<td>260</td>
<td>.741</td>
<td>2.445</td>
<td>(.687 - .794)</td>
</tr>
<tr>
<td>Feel more engaged in your community</td>
<td>252</td>
<td>.741</td>
<td>2.442</td>
<td>(.687 - .795)</td>
</tr>
<tr>
<td>Have experienced positive changes in your life</td>
<td>255</td>
<td>.725</td>
<td>2.486</td>
<td>(.670 - .781)</td>
</tr>
<tr>
<td>Feel more in control of your life</td>
<td>246</td>
<td>.701</td>
<td>2.552</td>
<td>(.644 - .759)</td>
</tr>
<tr>
<td>Eat meals that are better for you</td>
<td>246</td>
<td>.675</td>
<td>2.630</td>
<td>(.616 - .734)</td>
</tr>
<tr>
<td>Feel more independent</td>
<td>255</td>
<td>.659</td>
<td>2.642</td>
<td>(.600 - .717)</td>
</tr>
<tr>
<td>I have received support for caring for my spouse/partner/friend</td>
<td>236</td>
<td>.62</td>
<td>2.693</td>
<td>(.557 - .682)</td>
</tr>
<tr>
<td>Are more physically active</td>
<td>252</td>
<td>.569</td>
<td>2.768</td>
<td>(.507 - .630)</td>
</tr>
<tr>
<td>Worry less about problems that may come up</td>
<td>247</td>
<td>.543</td>
<td>2.779</td>
<td>(.480 - .606)</td>
</tr>
<tr>
<td>Have more energy</td>
<td>246</td>
<td>.531</td>
<td>2.786</td>
<td>(.468 - .594)</td>
</tr>
<tr>
<td>My health has improved</td>
<td>236</td>
<td>.523</td>
<td>2.810</td>
<td>(.459 - .587)</td>
</tr>
<tr>
<td>Do more volunteer work</td>
<td>257</td>
<td>.381</td>
<td>2.713</td>
<td>(.321 - .440)</td>
</tr>
</tbody>
</table>

Note. n = sample size; sd = standard deviation; min = minimum; max = maximum; CI = Confidence interval
Table 5. Impact of Senior Center Participation – Definitely Yes

<table>
<thead>
<tr>
<th>Impact</th>
<th>n</th>
<th>Mean</th>
<th>sd</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know where to get help if you need a service</td>
<td>252</td>
<td>.734</td>
<td>2.473</td>
<td>(.679 -.789)</td>
</tr>
<tr>
<td>Have made new friends</td>
<td>264</td>
<td>.670</td>
<td>2.635</td>
<td>(.613 -.727)</td>
</tr>
<tr>
<td>Have something to look forward to</td>
<td>254</td>
<td>.655</td>
<td>2.656</td>
<td>(.596 -.714)</td>
</tr>
<tr>
<td>I have received support for caring for my spouse/partner/friend</td>
<td>236</td>
<td>.620</td>
<td>2.693</td>
<td>(.557 -.682)</td>
</tr>
<tr>
<td>I feel more socially connected</td>
<td>250</td>
<td>.612</td>
<td>2.727</td>
<td>(.551 -.673)</td>
</tr>
<tr>
<td>Have learned new things</td>
<td>254</td>
<td>.597</td>
<td>2.742</td>
<td>(.536 -.658)</td>
</tr>
<tr>
<td>See friends more often</td>
<td>260</td>
<td>.587</td>
<td>2.748</td>
<td>(.527 -.648)</td>
</tr>
<tr>
<td>Feel happier or more satisfied with your life</td>
<td>250</td>
<td>.552</td>
<td>2.776</td>
<td>(.490 -.614)</td>
</tr>
<tr>
<td>Feel more engaged in your community</td>
<td>252</td>
<td>.506</td>
<td>2.787</td>
<td>(.444 -.569)</td>
</tr>
<tr>
<td>I feel like my mind is more active</td>
<td>248</td>
<td>.502</td>
<td>2.782</td>
<td>(.439 -.565)</td>
</tr>
<tr>
<td>I have gained knowledge on active aging trends</td>
<td>248</td>
<td>.494</td>
<td>2.793</td>
<td>(.431 -.556)</td>
</tr>
<tr>
<td>Have experienced positive changes in your life</td>
<td>255</td>
<td>.462</td>
<td>2.777</td>
<td>(.401 -.524)</td>
</tr>
<tr>
<td>Eat meals that are better for you</td>
<td>246</td>
<td>.461</td>
<td>2.799</td>
<td>(.398 -.523)</td>
</tr>
<tr>
<td>Feel more in control of your life</td>
<td>246</td>
<td>.456</td>
<td>2.776</td>
<td>(.393 -.518)</td>
</tr>
<tr>
<td>Feel more independent</td>
<td>255</td>
<td>.440</td>
<td>2.766</td>
<td>(.378 -.501)</td>
</tr>
<tr>
<td>Are more physically active</td>
<td>252</td>
<td>.394</td>
<td>2.731</td>
<td>(.333 -.455)</td>
</tr>
<tr>
<td>Worry less about problems that may come up</td>
<td>247</td>
<td>.375</td>
<td>2.701</td>
<td>(.315 -.436)</td>
</tr>
<tr>
<td>Have more energy</td>
<td>246</td>
<td>.297</td>
<td>2.551</td>
<td>(.239 -.354)</td>
</tr>
<tr>
<td>Do more volunteer work</td>
<td>257</td>
<td>.277</td>
<td>2.499</td>
<td>(.222 -.332)</td>
</tr>
<tr>
<td>My health has improved</td>
<td>236</td>
<td>.259</td>
<td>2.465</td>
<td>(.203 -.315)</td>
</tr>
</tbody>
</table>

Note. n = sample size; sd = standard deviation; min = minimum; max = maximum; CI = Confidence interval

Figure 10. Impact of Senior Center Participation – Definitely Yes
The total number of impact items identified by respondents was also summed to create composite variables, using both the yes/no and definitely yes methods. The yes/no results are presented in Table 6 and Figure 11. The average number of items identified by respondents was 12.91 out of 20 possible. The lowest average number (M=10.56) was identified for Wood County attendees, and the highest number was observed among Fulton County participants (M=16.67). County differences in impact were assessed using an ANOVA to see if the number of outcomes differed significantly by center. Consistent results were observed using both the yes/no and definitely yes methods, with statistically significantly higher impact in Fulton compared to Defiance and Wood counties. As noted earlier, however, data were collected using a different mode in Fulton, which could have affected the results. In-person data collection is more likely to result in acquiescence bias, where respondents have a tendency to respond more favorably rather than unfavorably when provided yes/no questions. Although notifications about data collection were sent to a randomly selected sample of participants (via the senior center’s emergency response system), the in-person mode is also likely to result in more regular senior center users. The number of items clearly differs by county, but none of the other differences reached a level of statistical significance.

Table 6. Total Impact Items Overall and by County – Yes/No

<table>
<thead>
<tr>
<th>County</th>
<th>n</th>
<th>Mean</th>
<th>sd</th>
<th>Min</th>
<th>Max</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defiance</td>
<td>29</td>
<td>10.76</td>
<td>35.16</td>
<td>0</td>
<td>20</td>
<td>(8.39 - 13.13)</td>
</tr>
<tr>
<td>Erie</td>
<td>16</td>
<td>13.75</td>
<td>41.17</td>
<td>0</td>
<td>20</td>
<td>(10.62 - 16.88)</td>
</tr>
<tr>
<td>Fulton</td>
<td>24</td>
<td>16.67</td>
<td>20.46</td>
<td>8</td>
<td>20</td>
<td>(15.47 - 17.87)</td>
</tr>
<tr>
<td>Henry</td>
<td>46</td>
<td>12.98</td>
<td>26.43</td>
<td>1</td>
<td>20</td>
<td>(11.14 - 14.82)</td>
</tr>
<tr>
<td>Ottawa</td>
<td>26</td>
<td>13.88</td>
<td>23.85</td>
<td>2</td>
<td>20</td>
<td>(11.93 - 15.84)</td>
</tr>
<tr>
<td>Paulding</td>
<td>39</td>
<td>12.54</td>
<td>19.37</td>
<td>0</td>
<td>20</td>
<td>(10.73 - 14.34)</td>
</tr>
<tr>
<td>Sandusky</td>
<td>22</td>
<td>11.18</td>
<td>25.23</td>
<td>1</td>
<td>20</td>
<td>(8.54 - 13.83)</td>
</tr>
<tr>
<td>Williams</td>
<td>29</td>
<td>14.14</td>
<td>33.06</td>
<td>3</td>
<td>20</td>
<td>(12.16 - 16.12)</td>
</tr>
<tr>
<td>Wood</td>
<td>39</td>
<td>10.56</td>
<td>48.66</td>
<td>0</td>
<td>20</td>
<td>(8.35 - 12.78)</td>
</tr>
<tr>
<td>Total</td>
<td>270</td>
<td>12.91</td>
<td>33.2</td>
<td>0</td>
<td>20</td>
<td>(12.19 - 13.62)</td>
</tr>
</tbody>
</table>

Note. n = sample size; sd = standard deviation; min = minimum; max = maximum; CI = Confidence interval
Table 7 and Figure 12 show the same results, but using the *definitely yes* method. As with satisfaction scores, this method resulted in lower numbers overall, and more variation across counties. The average number of items respondents felt certain about was around nine, with Fulton County respondents reporting the most ($M=12.42$), and Defiance County the fewest ($M=5.86$).

### Table 7. Total Impact Items Overall and by County – Definitely Yes

<table>
<thead>
<tr>
<th>County</th>
<th>n</th>
<th>Mean</th>
<th>sd</th>
<th>Min</th>
<th>Max</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defiance</td>
<td>29</td>
<td>5.86</td>
<td>34.31</td>
<td>0</td>
<td>19</td>
<td>(3.55 - 8.18)</td>
</tr>
<tr>
<td>Erie</td>
<td>16</td>
<td>8.94</td>
<td>51.49</td>
<td>0</td>
<td>20</td>
<td>(5.02 - 12.85)</td>
</tr>
<tr>
<td>Fulton</td>
<td>24</td>
<td>12.42</td>
<td>29.98</td>
<td>5</td>
<td>20</td>
<td>(10.66 - 14.17)</td>
</tr>
<tr>
<td>Henry</td>
<td>46</td>
<td>9.04</td>
<td>29.53</td>
<td>0</td>
<td>20</td>
<td>(6.99 - 11.1)</td>
</tr>
<tr>
<td>Ottawa</td>
<td>26</td>
<td>10.54</td>
<td>27.37</td>
<td>1</td>
<td>20</td>
<td>(8.29 - 12.78)</td>
</tr>
<tr>
<td>Paulding</td>
<td>39</td>
<td>9.05</td>
<td>20.40</td>
<td>0</td>
<td>20</td>
<td>(7.15 - 10.95)</td>
</tr>
<tr>
<td>Sandusky</td>
<td>22</td>
<td>7.68</td>
<td>25.79</td>
<td>0</td>
<td>20</td>
<td>(4.98 - 10.39)</td>
</tr>
<tr>
<td>Williams</td>
<td>29</td>
<td>10.59</td>
<td>40.70</td>
<td>0</td>
<td>20</td>
<td>(8.15 - 13.03)</td>
</tr>
<tr>
<td>Wood</td>
<td>39</td>
<td>7.41</td>
<td>46.06</td>
<td>0</td>
<td>20</td>
<td>(5.32 - 9.51)</td>
</tr>
<tr>
<td>Total</td>
<td>270</td>
<td>9.06</td>
<td>35.65</td>
<td>0</td>
<td>20</td>
<td>(8.30 – 9.83)</td>
</tr>
</tbody>
</table>

*Note. n = sample size; sd = standard deviation; min = minimum; max = maximum; CI = Confidence interval*
Other factors of interest

Participation in the senior center, loneliness, health, driving status, aging experiences, and financial hardship were also assessed in this study. The results of those analyses are reported in the subsections that follow.

Participation and inviting a friend

The frequency that respondents reported using each of the four senior center services was calculated using a scale from one to six, with lower numbers representing more frequency. The averages for meals, recreation, transportation, and supportive services were 3.52, 3.30, 4.58, and 5.64, respectively. The average for attending the center overall was 3.17, which is closest to the once a week category. Most respondents had started attending their center more than three years ago (65.2%), and more than half (56.0%) had attended during the past week. Respondents were also asked if they had ever invited a friend to go to the senior center with them, with 67.6% reporting that they had. Those who said they had never invited a friend were asked why, using an open-ended question. Those reasons are described in the sub-section that follows.

Qualitative responses

People gave a variety of reasons why they had not invited friends to accompany them to the senior center. The first theme that emerged included answers like "no reason," "never thought of it," "I don't know," etc. Some respondents go with spouse, a friend/s, a group, or their friends
invited them, which is classified as Theme 2. Others have friends that were already there, or they met their friends there (Theme 3). Still others had no one to invite, their friends passed, or refused, etc. (Theme 4). Some do not go at all, do not participate, are too busy to go, etc. (Theme 5). Finally, miscellaneous comments (Theme 6) included reasons such as food being bad, payment basis, people not very nice, not feeling welcome, not wanting their friends to play bridge, etc. In decreasing frequency, the order of themes for this question was: Theme 2 (18), Theme 1 (15), Theme 5 (14), Theme 3 (13), Theme 6 (10), and Theme 4 (8), missing/no response (0). Figure 13 presents the proportion of responses to Q86 by theme.

**Figure 13. Qualitative Analysis – Reasons for Not Inviting Friends**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1</td>
<td>15</td>
<td>19%</td>
</tr>
<tr>
<td>Theme 2</td>
<td>18</td>
<td>23%</td>
</tr>
<tr>
<td>Theme 3</td>
<td>13</td>
<td>17%</td>
</tr>
<tr>
<td>Theme 4</td>
<td>8</td>
<td>10%</td>
</tr>
<tr>
<td>Theme 5</td>
<td>14</td>
<td>18%</td>
</tr>
<tr>
<td>Theme 6</td>
<td>10</td>
<td>13%</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>n/a</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td></td>
</tr>
</tbody>
</table>

"Why not?" (pertaining to Q86 - "Have you ever invited a friend to go to the senior center with you?")
**Loneliness**

As described earlier, the eight items on the loneliness measure were summed to create a total score, with higher numbers representing less frequent experiences with loneliness. If respondents answered each of the eight questions, a score of 8 would suggest they often experienced every facet of loneliness, while a score of 27 would suggest hardly ever or never experiencing any loneliness. The average score was 18.25, suggesting that respondents reported loneliness very close to the some of the time range on average.

**Health and physical activity**

Recall that self-rated health used a scale from one (poor) to five (excellent), with higher numbers representing better health. The average score was 3.33, suggesting that most respondents considered their health to be between good and very good. Current and lifetime physical activity were also measured on a five-point scale that ranged from not at all active to very active, with higher numbers representing more activity. The average level of current physical activity was 3.01, and lifetime activity was 3.97.

**Driving status and transportation mode**

In terms of driving status, 83.3% of the respondents reported that they currently drive themselves places when they need to. Of those who drive, 94.1% reported that they had driven within the past week. However, many current drivers did report avoiding some difficult driving situations, with 42.1%, 27.2%, and 58.4% reporting avoiding driving at night, on busy roads, and in bad weather, respectively.

**Aging experience**

In terms of respondents’ experience with aging, the largest group (41.6%) reported having a mainly positive experience, followed by neither a positive nor a negative experience (26.2%), very positive experience (22.0%), mainly negative experience (7.4%), and very negative experience (2.9%), corresponding to an average score of 2.28 (on the one to five scale, with lower numbers representing more positive experiences). The sum of the composite variable created from the six sub-questions resulted in an average score of 2.03, with a range from zero to six, which also suggests that most respondents have had positive aging experiences.

**Financial difficulty**

The scale for the financial difficulty item ranged from zero to five with higher numbers representing greater difficulty meeting monthly bills. The average score was 1.60, with percentages for each category as follows: not at all difficult (63.4%), not very difficult (18.4%), somewhat difficult (14.0%), very difficult (3.6%), and completely difficult (0.6%).
**ADDITIONAL FINDINGS**

The relationship between satisfaction, impact, and many of the other factors measured in this study were assessed using a variety of statistical tests. Pearson product-moment correlations were used to assess the relationship between satisfaction and the impact of the senior centers. A statistically significant, but weak positive correlation was observed between these factors using the yes/no version of each \( r(218)=0.258, p<0.001 \). Using the definitely yes versions of both items, a moderate positive correlation was observed \( r(218)=0.430, p<0.001 \). In both cases, the positive correlation means that as satisfaction increased, so did the number of items respondents identified as having positively changed because they go to the senior center.

Correlations, independent samples t-tests, and ANOVAs were also used to assess the relationship between overall satisfaction (using both methods) and many other factors in this study, including age group (<75 versus 75+), loneliness, health, physical activity, center participation, demographics, aging experience, and financial strain.

No significant associations were observed between satisfaction and age group, physical activity, center participation, financial strain, age, education level, gender, or race. Statistically significant, positive relationships were observed between yes/no satisfaction and loneliness \( r(221)=0.14, p<0.05 \), while a negative relationship was noted with aging experience \( r(222)=-0.14, p<0.05 \). In other words, as satisfaction level increases, participants report less loneliness and a more positive aging experience. These findings were statistically significant, but represent weak or very weak relationships between these factors. Using the definitely yes method, a significant positive relationship was observed between satisfaction and loneliness \( r(221)=0.30, p<0.001 \), as well as satisfaction and health \( r(221)=0.15, p<0.05 \). The loneliness finding echoes that noted using the yes/no method, and the health result suggests that higher satisfaction is related to reporting better health.

**Other factors of interest**

Several other bivariate tests were conducted to assess the relationships between other variables of interest in this study. Whether respondents had invited a friend to go to the center with them was analyzed by county, and a significant difference was observed \( F(8,263)=2.221, p<0.05 \) between Fulton \( (M=91.7\%) \) and Erie Counties \( (M=55.6\%) \), as well as Fulton and Wood Counties \( (M=57.5\%) \).

Inviting a friend to the senior center was also assessed to see if participation in one of the specific center activities made a difference in this issue. Participation in congregate meals \( \chi^2(1)=6.03, p<0.05 \) and recreation activities \( \chi^2(1)=9.32, p<0.01 \) had a significant association with inviting a friend. Specifically, those who participated in congregate meals were significantly more likely to invite a friend to the center \( (M=67.1\%) \) than those who did not \( (M=46.1\%) \), with a similar pattern observed for those who participated in recreation activities \( (M=73.6\%) \) compared
to those who did not ($M=51.7\%$). In addition, the number of activities in which one engages was also assessed to see if it made a difference in inviting a friend. A significant relationship was observed between these factors ($t(246)=-3.42, \ p<0.001$), with those who have invited a friend reporting a significantly higher number of activities on average ($M=1.79$), than those who have not invited a friend ($M=1.37$).

The relationship between participating in each of the four senior center activities and other factors were assessed next. There were no significant relationships observed between loneliness and participating in any of the four activities. In terms of health, those who participate in congregate meals ($t(243)=-3.48, \ p<0.001$) have significantly better health ($M=3.44$) than those who do not ($M=2.86$). Again, similar results were observed for recreation activities ($t(232)=-2.50, \ p<0.05$), where participators had better health ($M=3.50$) than non-participators ($M=3.14$). Participating in more activities in general was also very weakly, but positively associated with better health ($r(251)=0.15, \ p<0.05$). Finally, the relationship between number of reported impact items and age group was also assessed, but no statistically significant differences were observed.

Finally, inviting a friend to the center was also assessed to see if it was significantly related to satisfaction and impact, using both the yes/no and definitely yes methods. The results indicated that there was no difference inviting a friend by either satisfaction metric, but both the yes/no method of calculating impact ($t(256)=-7.11, \ p<0.001$), and the definitely yes method ($t(256)=-6.20, \ p<0.001$) were significantly related to inviting a friend to the center. Using the yes/no method, the average number of impact items for those who had invited a friend was 14.8, compared to 9.7 for those who had not. Likewise, using the definitely yes method, the average for those who had invited a friend was 10.8 impact items, compared to 5.9 for those who had not.

**REGRESSION FINDINGS**

**Satisfaction**

Each of the two overall satisfaction ratings (yes/no and definitely yes) were regressed on the other factors of interest in this study. Initially, regression models were fit with all of the predictors described above included, with a particular focus on those that were significantly associated with satisfaction in the bivariate context. The independent influence of each predictor was assessed and those that showed no relationship to satisfaction (i.e., those with very large $p$-values) were removed from the model, and it was re-fit. This process was followed until only significant or nearly significant predictors remained. In the final yes/no model ($F(11,200)=6.20, \ p<0.001, \ R^2=0.25$), county, impact ($\beta=0.001, \ p<0.001$), aging experience ($\beta=-0.010, \ p<0.05$), and education were independently significant. Respondents’ age approached significance ($\beta=0.001, \ p=0.100$), so it was also retained in the final model. Results suggested that higher satisfaction was related to greater reported impact, a more positive aging experience, more education, and (potentially) older age. In addition, Erie County had statistically significantly lower satisfaction than all other counties ($p<0.01$ for all comparisons).
In the final definitely yes model ($F(10,202)=10.75, p<0.001, R^2=0.35$), county, impact ($\beta=0.005, p<0.001$), loneliness ($\beta=0.007, p<0.01$), and frequency of visiting the center ($\beta=0.027, p<0.05$) were independently significant. Higher satisfaction was associated with greater impact, less loneliness, and visiting the center less often. The county comparisons revealed that Erie was significantly lower than all other counties ($p<0.05$ for all comparisons); Sandusky was significantly lower than Henry ($p<0.01$), Paulding ($p<0.05$), Williams ($p<0.05$), and Wood ($p<0.05$); and Defiance was significantly lower than Henry ($p<0.01$) and Williams ($p<0.05$).

**Impact**

The sum of the impact items identified by respondents was also regressed on the other predictors of interest using both the yes/no and definitely yes methods. These variables are a count of ways in which the center has made an impact in respondents’ lives, and count variables often follow a non-normal distribution. The distribution of this variable was strongly left (negatively) skewed, making linear regression techniques inappropriate. Instead, negative binomial regression models were fit. To identify significant predictors in the model, the same procedure was followed as described in the previous sub-section. The results described below include the parameter estimate from the regression model (beta coefficient), the exponentiated beta (in negative binomial regression, this calculation results in an incidence rate ratio - IRR), and the $p$-value. In this context, the IRRs can be interpreted as the percent change in the count of impacts, relative to one. In the final yes/no model, county ($p<0.05$), less loneliness ($\beta=0.019, IRR=1.019, p<0.001$), longer longevity with the center ($\beta=0.090, IRR=1.094, p<0.01$), greater attendance frequency ($\beta=0.115, IRR=0.891, p<0.001$), and participating in more activities/services ($\beta=0.065, IRR=1.068, p<0.05$) were all independently significant predictors of senior center impact. As an example, the IRR of 0.891 for attendance frequency suggests that for every one-unit increase in the categories assessed (these move from greater frequency to less frequency), the number of impacts reported by participants will decrease by 10.9%, so attending less often is related to fewer reported impacts.

Differences in each county by impact (using the yes/no method) were assessed by comparing each center to every other one. The only significant differences observed involved Wood County. Compared to Wood, significantly more impacts were observed for Erie ($\beta=0.278, IRR=1.32, p<0.05$), Henry ($\beta=0.306, IRR=1.36, p<0.01$), Ottawa ($\beta=0.266, IRR=1.305, p<0.05$), Paulding ($\beta=0.236, IRR=1.266, p<0.05$), and Williams ($\beta=0.276, IRR=1.318, p<0.01$), after controlling for the other factors in the model. Also note that Fulton County was not represented in this model because those respondents were not asked about activity involvement, one of the significant factors in this model. In terms of interpretation, the IRRs greater than one suggest that, for example, participants in Erie County will report about 27.8% more impacts than those of Wood County, after controlling for other factors included in the model.
In the final *definitely yes* model, no significant differences by county were observed. More impact items were associated with less loneliness \((\beta=0.039, \text{IRR}=1.039, p<0.001)\), longer longevity \((\beta=0.117, \text{IRR}=1.124, p<0.05)\), and greater attendance frequency \((\beta=-0.173, \text{IRR}=0.841, p<0.001)\). More financial difficulty \((\beta=0.091, \text{IRR}=1.095, p=0.069)\) was also retained in the final model, as it approached significance.
As noted earlier, the primary research questions addressed in this study were related to understanding satisfaction with senior centers overall, by the four services of interest, and by each individual county. Additionally, this study addressed the impact of the senior centers on the lives of their participants. Overall, satisfaction levels calculated in this study were extremely high. These findings were similar to previous research conducted elsewhere (e.g., Administration for Community Living, 2012; Florida Department of Elder Affairs, 2005; Kleist, 2004), and in Lucas County, Ohio (Vivoda & McGuire, 2017), a nearby urban area.

Overall satisfaction rates were in the mid-90s, and when the yes/no method of measuring satisfaction was used, the rates did not differ between the composite variables created from all of the individual questions, or using the single item (to which some of the initial refusals responded). When using the definitely yes approach, however, people who only agreed to answer the single satisfaction question, were significantly less certain about their satisfaction, than those who answered all of the items. It is possible that as individuals answered more questions about their center, they became more certain about their responses. It could also be that being more certain about one’s satisfaction led people to be willing to participate. If that is the case, those less certain about their satisfaction would not be adequately represented in the full survey results.

Satisfaction rates also varied from county to county, and there were several significant differences observed between counties, in both the bivariate and regression findings. The qualitative responses may provide some of the context and reasons for these differences, and are a good place for center staff to begin looking to identify potential avenues for improvement. Counties that scored particularly high in overall satisfaction may also serve as a benchmark for other counties to emulate. Assessing how services are implemented in those counties may be an effective way for the AOoA or other counties to develop a best practices approach to improve satisfaction.

In terms of the four services of interest, satisfaction findings were similar to previous research. When using the yes/no method, the satisfaction across the four services was nearly identical, ranging from a low of 95.0% (meals) to a high of 96.7% (transportation). The definitely yes approach showed a little more variability in satisfaction, but still only ranged from 80.7% (meals) to 86.7% (supportive services). Meal service was the most used by far (204), followed by recreation activities (142), transportation (47), and supportive services (45).

Both the quantitative and qualitative data suggest very high levels of satisfaction, but the qualitative responses also provided some suggestions for improvement. Across the four services, the most universal theme was related to choice. In general, participants would like more choices, and for the services to be tailored to their needs. This theme persisted, whether it was related to food entrées, recreation class choices and times, transportation options, or supportive services. The senior center users are consumers, and consumer choice often drives whether a service or product
is used. Each county, and indeed each senior center, serves a different clientele, which may have different needs. Each center should strive to adapt best practices from other centers as much as possible, but with the understanding that they are serving the unique needs of their particular population. To better understand this, counties could develop brief questionnaires about each activity, which would be one simple way to begin a needs assessment and understand users’ preferences. This would allow the centers to expand upon some of the qualitative findings described in this report, and identify ways to make their services more meaningful to their participants.

Nearly all of the other factors measured in the study were assessed to see if they were statistically related to level of satisfaction. Weak but statistically significant associations were identified between the yes/no method of calculating satisfaction and impact, loneliness, and aging experience. The definitely yes method of calculating satisfaction generally revealed stronger associations with the other factors of interest. It was significantly related to impact, loneliness, and health. Similar results were observed when using regression techniques, with significant relationships found between satisfaction and impact, aging experience, education, loneliness, frequency visiting the center, county, and potentially age (marginally significant in the yes/no model). These results also provide some context for counties to better understand what factors may influence satisfaction. Unfortunately, the cross-sectional method used here cannot establish a causal pathway between factors. For example, it is not possible to know whether participants have a more positive aging experience because they are satisfied with their senior center, or if they rate their center more highly because of their positive outlook on aging.

The other primary goal of the study was to better understand the impact that the centers have on the lives of their participants. Nearly 90% of respondents reported that because they go to their senior center, they have something to look forward to, with about 66% reported that they are certain about that feeling. Around 87% said they know where to get help, and about 85% feel more socially connected and feel happier or more satisfied with life. These items were the four identified most often using the yes/no method, with similar results using the definitely yes approach. With that method, the top four were: knowing where to get help (73%), have made new friends (67%), have something to look forward to (66%), and have received support for caregiving (62%). Although the order of these items change slightly from one method to the other, they illustrate how impact captures something very different than satisfaction with a particular service. These are much broader issues, and result not only from the centers’ provision of services, but also the environment they provide for participants to socialize and have new experiences. The centers are places that improves the lives of older adults in many other ways. If an older adult has a problem, the senior center can help them find a solution, which provides more peace of mind. Almost 85% of the study respondents said that simply because of their involvement with their senior center, they feel happier and more satisfied with their lives. This finding illustrates the broad reach of the centers, and speaks to the important role they play, above and beyond the literal provision of food, recreation, transport, and supportive services.
The analyses revealed that a number of factors were significantly related to how many impacts are identified by senior center participants. The negative binomial regression analyses indicated that county, loneliness, longevity of center attendance, frequency of attendance, more activity involvement, and potentially financial difficulty (approached significance in the definitely yes model) are all related to impact. Differences in impact by county were observed, but not necessarily in the same counties where satisfaction differed. This again illustrates that these measures capture different aspects of one’s experience when attending a senior center. Similar to benchmarking satisfaction, attempting to better understand what is done differently in counties where impacts were particularly high is also a promising approach for counties where impact was significantly lower. Implementing center-specific questionnaires to better understand why overall impact is low, or even a particular impact of interest, would potentially help centers improve this result.

Aside from assessing satisfaction and impact, several other analyses were also conducted to gain a better understanding of the senior centers overall, and identify how positive changes could be made. For example, whether a participant had ever invited a friend to the center was examined to assess whether it was related to a number of other factors. In terms of the four services of interest, participation in congregate meals and recreation activities were significantly related to inviting a friend, as was the overall number of activities (out of the four studied here). This finding provides a potential opportunity for the centers to increase their membership, particularly for using transportation or supportive services, those that are currently unrelated to inviting someone to accompany you. For example, a center-based campaign related to inviting a friend may be particularly helpful given that the qualitative findings suggested that it never occurred to some people to invite a friend, and that some people were not sure if their friends would be interested. A potential campaign could include a competition, with incentives for the person who brings the most new people to the center. It could also be framed around getting a new person to participate in different types of activities at the center, which would not only increase membership, but also activity use and socialization.

Overall, this study found that senior centers in rural counties served by the AOoA, are providing services with which their clientele are highly satisfied. The centers are also having an important impact on the lives of local older adults above and beyond the services they provide. Some of the counties in the area have a particularly strong satisfaction level and impact, and it may be beneficial to study them more closely, to create a model for the other area centers to follow. Understanding and taking advantage of the existing strengths is the area is a very important approach toward improving the entire local center network.

**Limitations and Strengths**

This study was cross-sectional in nature, and therefore causation cannot be established. The questionnaire for eight of the counties was administered via telephone, and a shortened version of the questionnaire was administered in-person for Fulton County, which makes comparisons
difficult. This study only assessed senior center users in rural counties of Northwestern Ohio, so the findings are only generalizable to that group. The findings from the current study were very similar to previous research conducted elsewhere, however.

This study also had several strengths that should be noted. It assessed both satisfaction and impact simultaneously, and as the findings demonstrate, these factors are distinct from one another. The response categories used were easy for respondents to remember, but also provided more variability to study differences in how other factors affect satisfaction and impact. It employed open-ended questions related to several factors to allow the participants a “voice” in how they feel about things. These items also provided a richer context within which to understand the quantitative results. This study also assessed many additional factors (aside from satisfaction and impact), so the potential relationships between those factors could be assessed. Finally, regression analyses were employed, which allows for a clearer understanding of the observed relationships in the full multivariable context.
REFERENCES


APPENDIX 1

SENIOR CENTER DESCRIPTIONS

Please note that the descriptions in this appendix were provided by the AOoA for inclusion in this report.

Defiance County

Defiance County Senior Centers are operated by the Defiance County Senior Services and the Defiance County Commissioners. There are two centers in the county located in Defiance and Hicksville. Their mission statement is to provide senior adults throughout Defiance County with nutritional, educational, social and wellness programs in a safe and welcoming environment.

Programming includes nutrition services, transportation, education, supportive services and activities. A hot lunch meal is provided on weekdays at the senior centers, as well as home delivery. Medically necessary therapeutic meals are also available. Activities and supportive services include Alzheimer’s support groups and individual consultations, Music and Memory (iPods with songs that are familiar and enjoyable to the individual with Alzheimer’s Disease) tax assistance, Medicare Part D education, grocery shopping assistance, health screenings (blood pressure), exercise (Zumba, yoga, band stretching), bingo, cards, arts and crafts, evidence-based wellness programs, trips, dinners and special events. Defiance County Senior Services encourages those who are willing to share their time and talents to volunteer with us. More information may be found online at www.defiance-county.com/senior-services/.

Erie County

Erie County Senior Center is operated by Erie County Metropolitan Housing Authority. There are two centers in the county located in Sandusky and Birmingham (satellite site that meets once a week). The Erie County Senior Center is a multi-faceted service and activity center providing opportunities for senior citizens in Erie County.

Programming includes nutrition services, transportation, education, supportive services, and activities. A hot lunch meal is provided on weekdays at the Erie County Senior Center in Sandusky, as well as home delivery. Activities and supportive services include health screenings (Erie County Health Department clinic), handicap equipment loan, exercise classes, arts and crafts, trips, special events, speakers, bingo and cards, social groups/clubs, monthly flea markets, tax assistance and volunteer opportunities. The Erie County Metropolitan Housing Authority operates and administers subsidized housing in Erie County. More information may be found online at www.eriesenior.org/services.htm.

Fulton County

The Fulton County Senior Centers are operated by the Fulton County Commissioners. The main senior center is located in Wauseon with satellite sites in Archbold, Fayette, Delta, and
Swanton. The Fulton County Senior Center aims to be the focal point for the senior population in the community by providing opportunities for independence, growth and wellness.

Programming includes nutrition services, housekeeping, education, supportive services, and activities. A hot lunch meal is provided on weekdays daily at Fulton County Senior Center and at the satellite sites when open, as well as home delivery. Activities and supportive services include health screenings, evidence-based wellness programs, exercise (cardio drumming, Tai Chi, Line Dancing) Brain Games, Bingo and Cards, Guest Speakers, trips, special events, arts and crafts, choir, Medicare assistance, applying for benefits, and volunteer opportunities. More information may be found at www.fultoncounty.oh.com/1353/Senior-Center.

**Henry County**

The Henry County Senior Center is operated by the Henry County Commissioners. The Henry County Senior Center is located in Napoleon; satellite sites are located at Liberty Center and Deshler. The mission of the Henry County Senior Center is to empower older adults to thrive in all aspects of their lives.

Programming includes nutrition services, transportation, wellness programs, supportive services, and activities. A hot lunch meal is provided daily on weekdays at the Henry County Senior Center, as well as home delivery. Liberty Center meets one day a week for crafts and Tai Chi. Deshler meets two days a week for exercise. Potluck lunch occur at both locations once a month. Activities and supportive services include health screenings, evidence-based wellness programs, exercise (Tai Chi, Zumba, Line Dancing, pickle ball, basketball), Medicare assistance, art studio classes, woodworking, trips, support groups (caregiver, grief and mental health), bingo, cards, and special events. The Henry County Senior Center just built a new facility, which opened in 2017. More information may be found at http://henrycountyseniorcenter.com/.

**Ottawa County**

The Ottawa County senior centers are operated by the Ottawa County Senior Resources and the Ottawa County Commissioners. The main senior center is located in Danbury and is open on weekdays. There are satellite locations open two-three days per week in Port Clinton, Oak Harbor, Elmore, and Genoa. The Put-In-Bay Senior Center is located on South Bass Island and is open weekdays. The Ottawa County Senior Resources is the main source of services for seniors in Ottawa County.

Programming includes nutrition services, transportation (sub-contracted thru OCTA), health and wellness education, activities, and supportive services. A hot meal is provided weekdays, as sites are open, as well as home delivery. Dinner is provided two days a week at the Danbury Senior Center. Lunch is provided by a local restaurant one day a week at the Put-In-Bay Senior Center. Activities and supportive services include health screenings (clinic operated by Ottawa County Health Department), evidence-based wellness programs, exercise, arts and crafts, bingo and cards, trips, guest speakers, Medicare assistance, and special events. The Ottawa County
Senior Resources also provides Home Care Assistance Program under the direction of a social worker to provide personal care services to homebound older adults. Also, Senior Resources provides funding for Daybreak, the only Adult Day Services program in Ottawa County. More information may be found at [http://www.co.ottawa.oh.us/index.php/senior-resources-2/](http://www.co.ottawa.oh.us/index.php/senior-resources-2/).

**Paulding County**

Paulding County Senior Center is operated by the Paulding County Commissioners. There is one senior center located in Paulding. The mission of the Paulding County Senior Center is to identify and assist older adults by providing quality services designed to help them overcome loneliness and maintain self-esteem.

Programming includes nutrition services, transportation, education, supportive services, and activities. A hot meal is served daily weekdays at the center, as well as home delivery. Activities and supportive services include health screening, exercise, support groups, cards, bingo, Medicare assistance, nutrition education, safety education, trips, and special events. Volunteer opportunities are also available. More information may be found at [https://www.facebook.com/Paulding-county-senior-center-529700510416027/](https://www.facebook.com/Paulding-county-senior-center-529700510416027/).

**Sandusky County**

Sandusky County Senior Centers are operated by WSOS Community Action. There are three centers located in Fremont, Clyde, and Gibsonburg. WSOS Sandusky County senior centers help older adults stay active, healthy, and vibrant.

Programming includes Life Transitions, Food Experience, Nutrition Education, Health & Wellness, Social, transportation, and recreation. Additionally, the centers offer senior nutrition program (lunch daily), arts and crafts, bingo, cards, special events, health screenings (blood pressure and blood sugar checks), income tax assistance, evidence-based health and wellness, SNAP Education. WSOS also operates Public Transportation (TRIPS), HEAP, and Meals-on-Wheels programs. The program was initially accredited by the National Institute for Senior Centers in 2008. More information may be found at [www.wsos.org](http://www.wsos.org).

**Williams County**

Williams County senior centers are operated by Williams County Department of Aging and the Williams County Commissioners. The main senior centers are located in Bryan and Montpelier. Satellite senior centers are located in Edon, Edgerton, Pioneer, West Unity, and Stryker. The mission of the Williams County Department of Aging is to make a positive difference in the lives of older adults by providing services and support such as transportation, nutrition, health education information, and fellowship.

Programming includes nutrition services, transportation, health and wellness, activities, and supportive services. A hot meal is provided daily weekdays at the main centers, as well as home delivery. A hot meal is provided four days a week at the satellite centers. Activities and
supportive services include health screenings, evidence-based wellness programs, exercise, arts and crafts, bingo and cards, trips, guest speakers, Medicare assistance, special events, and volunteer opportunities. The Williams County Department of Aging also offers Independent Living Assistance, which provides help with errands, shopping and bill paying. More information may be found at http://www.co.williams.oh.us/165/Department-of-Aging.

**Wood County**

The Wood County Committee on Aging, Inc. (WCCOA) is a self-incorporated non-profit organization (which is tax supported) committed to providing services for the senior citizens of Wood County. Its goal is to help elderly people maintain their independence in their own homes for as long as possible. There are seven senior centers located in Bowling Green, North Baltimore, Walbridge, Perrysburg, Rossford, Wayne, and Pemberville. The mission of the Wood County Committee on Aging is to provide older adults with services and programs which empower them to remain independent and improve the quality of their lives.

Programs include social services, life enrichment, nutrition, and supportive services. A hot meal is served daily on weekdays at dining sites, as well as, home delivery. In addition, evening meals are served three days a week. The Wood County Committee on Aging operates a Social Services Department staffed by registered nurses and licensed social workers. Social services include health screenings, support groups, medical transportation, medical equipment loan closet, consultation. Life enrichment programs include exercise and wellness programs, art classes, seminars and workshops, technology classes, discussion groups, trips, and special events. Supportive services include income tax assistance and legal services. Volunteer opportunities are also available. More information may be found at http://wccoa.net/.
APPENDIX 2

QUALITATIVE SUGGESTIONS BY COUNTY

At the request of the AOoA and the county senior center staff, responses from actual participants follow, broken down by county and service/question. Note that these quotes have not been edited, except where the response might have been identifying. Responses that suggested nothing be changed or no knowledge (e.g., I don’t know) were also removed for space considerations.

Defiance

Meals

- A little more seasoning
- cook the vegetables better
- Greater variety, and probably, how would you say, you know they have some of the weirdest damn combinations. They come up with things like potatoes and pasta, that's gaggy you know? When I got there, I'm very selective when I go because I reject probably 3 out of the 5 suggestions I won't even go near it. That's why you got a lot of probably yes's. I know people who go every day so they have a longer list of why they could improve. The pairing of the food is a good way to put it.
- have a little more meat
- If they could have a salad bar every day that would be great
- more days with the salad bar
- more variety
- overcooking the food
- The vegetables are served over-cooked, have vegetables not cooked like they are. They're practically worth nothing as far as I am concerned
- We go on Wednesday and it seems like Wednesday is the day when they don't have a nice full meal. They'll have something light, so I'd like to have that switched around instead of a lighter menu. I'd like to see some day variety there.

Recreation

- Better equipment in the rec center, at least have stuff that works.
- feels like the cost for yoga classes keep people from going. Also people who are less mobile do not have many options for participation in activities
- get more men to play cards
- going different places
- going out more
• Increasing types of classes they offer. All I know of now is yoga. But if it was a specific classes like core or balance, those would be interesting for me. I would like to take a class that would increase general stamina.
• maybe more craft oriented things that are a little bit more out of the ordinary (crochet, intriguing things, new things that I haven’t tried before)
• Probably more evening events

Transportation

• allow transportation on Friday

Supportive Services

• abilities to provide a wider range of help

Why haven’t you invited a friend to the center?

• Daughter drives her there
• Does not go in
• goes with a group
• I don't have time
• I don’t use the senior center that much.
• just uses transportation
• never thought of it
• Well when I go out there I see some of my friends. So I don’t need to invite them because if they wanna go they’d go.

Erie

Meals

• better tasting
• Fresh vegetables instead of cooked vegetables
• larger desserts
• Less carbs
• make servings larger
• More food
• more food
• more variety
• Satisfied would not change anything
• Sometimes the menu is not the best
• start offering fish entrees again
• tastier food
• The cooks
Recreation

- Bad, overall better quality
- Disabled
- Don't really know what they have to offer
- have shuffleboard
- make classes more accessible (people need to be more friendly at the front desk) I do not feel welcome
- Not to bother you with them
- Outside exercise equipment too, they don't have any there. They have a park that has outdoor exercise equipment for summer, spring, and fall

Transportation

- None

Supportive Services

- None

Why haven't you invited a friend to the center?

- Doesn't go
- don't feel welcome, people at front desk are stand offish
- don’t think they’d want to go
- I didn't think about it
- I don't drive
- I don't know anyone who would want to go

Fulton

Why haven't you invited a friend to the center?

- The ones she does not are not yet retired.

Henry

Meals

- They bring out milk in a carton now and I like it when they pour it in a glass much better
- really nothing, they seem to be doing a very good job
- Sometimes the meals could be a little hotter...a little warmer
- Maybe a little more proportion on some items in general
- More baked spaghetti
- Offer dinner also
• Be honest with you, I have no clue. Like I said I don't go that often. Anytime I do go if I want more of whatever I can go get it. The only thing that ticks me off is they throw away all the leftover food. That's a waste of food.
• Get a different cook. They have high top tables and we can't get on them - on the chairs.
• Have more fruit
• No, maybe a bigger variety, a larger variety
• smaller portions

Recreation

• add a pool table
• Geared towards more to the senior citizen
• I believe they should offer a class for people who have not done an exercise class before because if you go to the normal classes and don’t do it right people make fun of you
• I wish the transportation would take me home after exercises
• Later in the afternoon activities
• Maybe more evening meals with entertainment
• More of them
• Offer more
• The timing of these games is not convenient for me and I haven't tried them
• They need to lower the basketball basket, they're too high.
• they probably need a class for the younger like 60-75, and an older one for people over 80, the class is a little too fast
• Wood working class building corn holes boards and she thinks that is great

Transportation

• large groups on the bus is very uncomfortable, rather have smaller vans
• Offer more transportation for outings so more people can attend
• the scheduling
• We need more vehicles
• when the van picked up more than 2 people I became very crammed and with the amount of time it took to get me home after the others

Supportive Services

• Add one more staff

Why haven’t you invited a friend to the center?

• Because my friends already go
• Because usually they're asking me
• conflicting schedules
• goes with another friend
• haven't thought to
• I can't find anyone to go with me
• I was invited by friends
• It’s brand new and I’m just getting used to it myself.
• It's usually just me and my husband
• I've had friends invite me
• meet friends there
• My friends go with me

Ottawa

Meals

• Instead of 11:30 we could eat at noon
• more mac'n'cheese less turkey
• More participation
• no processed food
• That they serve it hot
• the food is adequate, it’s not always my preference
• the meals aren't that great sometimes
• They could have soda there
• variety

Recreation

• adding physical exercises
• bring back dancing or more active classes
• bring back Wii bowling more often, or something with competition
• Get more people to attend
• Just getting together...lots of different clubs meet there and...we try to leave the senior center on its own...we all kind of do things together.
• Maybe a microphone so we can hear better because I don't hear well
• more conversations with everyone
• More participation from more people
• not many people want to do the exercise
• Probably more outdoor activities
• some classes geared for younger people

Transportation

• limited hours, had to leave early
• Only use it for activities
Supportive Services

- I only go for taxes, not sure on other services
- We've had to adjust to two new leaders in the center in the past year. We are kind of handicapped with how much help is available. The social meetings-having a group to belong to is important to being socially warm.

Why haven’t you invited a friend to the center?

- They’re not that interested in it

Paulding

Meals

- Fresh vegetables
- I don’t know. Maybe a little different from the menu sometimes but I’m not sure, I’m satisfied with what they serve.
- I don’t know. Sometimes we get too much.
- I don't like steamed tomatoes and I don't like steamed tomatoes quite that often
- larger portions
- Less carbs and starches
- Less starch
- offered an evening meal more often
- Probably less spaghetti, it falls off my fork
- Sometimes I have a little of trouble with things with tomatoes, so if they have something like spaghetti I do not eat those. On those days I would cook for myself. And for those who can tolerate tomatoes, the meals are very good.
- They would serve hot tea

Recreation

- Do things within different communities within the county
- Get into the community as a whole, regular aerobic exercise, NEEDS inside outside pool.
- it's made up more for women than men
- less walking on outings because that is difficult for me
- Maybe a walking group of some kind, maybe before lunch or after lunch
- More music

Transportation

- In the summertime I'm out and ready for them when they come and in the winter you can't be sure, it's a little, depending on the weather, it could be challenging waiting on them
- More openings/ more transportation
• Sometimes it's too late for me to get a hold of them to cancel a ride
• We'd have more vehicles and more people to drive because we're pretty busy

Supportive Services

• Sometimes I miss some doctors’ appointments and I can't call in time

Why haven't you invited a friend to the center?

• Because I generally go everywhere with my husband
• Don’t go often/went with mom
• Friends already attend and meet there
• I don't go hardly ever
• I usually go with husband
• I will, I just use the services now
• It never came up
• Usually go with my husband

Sandusky

Meals

• Better desserts
• Dessert
• get rid of the liver and onions meal
• more time to eat
• more variety
• The amount - it’s too much. But for some people that may be fine. I only eat food when I play bridge, I don't choose to eat the meals so I wouldn’t choose to eat dinner at noon.
• To have variable time and not be...we think 11:30 is too early. For people who live there in the facility that is okay, but we are on a different schedule and it is just too early for us to eat lunch.

Recreation

• Center is in the basement so it is gloomy and dumpy. There is very little parking. Change the location. Attendance is dropping.
• Have it on the first floor. Center is in basement and that is discouraging
• Like to have more chair yoga and things like that. Two more exercise activities per month
• Need a way to get there
• Physically cannot, would if could
• We have people that can't really play the cards anymore but they keep coming so I don't really know how to put that
Transportation

- I cannot go out in the winter, would use more if she could leave home
- MORE! So we can travel and take day trips

Supportive Services

- More

Why haven't you invited a friend to the center?

- Health reasons, cannot go anymore
- I only go to play bridge.
- I'm out in the country and the friend I do have is like a cousin in town and the other two are in the nursing home. So when I do go I just go on my own but there are people there that I know. They are very friendly and very accepting.
- Meet friends there
- Meet people there
- Never asked
- not that kind of a person
- Oh no, they're are not around.

Williams

Meals

- better selection of food
- Bigger selection of what you get
- have more food quantity served
- People could take home what they don't eat. Portions are too big and it would be nice if they could not throw that away, but take it to eat later.
- See fish on the menu
- serve fish
- the taste
- Too many starches
- too much chicken, there's only so many ways you can cook it. Diversity in the food
- Vegetables over cooked. Delivery in heated containers causes sogging

Recreation

- Can't drive because of age, does not feel she can do much
- I can't think of any because I know they play a lot of different games and have exercise machines and they have a Wii, you know what that is, but I've never played it. So they do have things for them.
• manager of the center, becoming too old.
• More card games
• More cards and more involvement in games
• More variety
• Nothing, they got enough. I read the paper I can see what they're doing up there and it's perfectly content for the people that can do it, but I can't.
• Somebody better teaching it.
• Would be active if didn’t have pain

Transportation

• A different driver. The driver is unkind and inconsiderate
• depend on the same person driving each time

Supportive Services

• Site manager isn't great. Doesn't do a lot

Why haven't you invited a friend to the center?

• because I don’t want them to play bridge
• been invited
• Friends at center
• most of my friends are already there
• Most of the people that I consider friends are the same age as I am so they go there too (no need to invite them).
• most of them already go
• My family moved me here two years ago and I can't get out and I can't do anything.
• never thought of it
• No reason, everyone around here isn't old enough to be a senior yet.

Wood

Meals

• A new kitchen in a new building.
• donation too cheap. Overall great job
• Eliminate onions
• Hotter temperature
• It would be nice if we had more salads.
• Larger portions of some foods
• less meat, more vegetarian options
• More fish
• More hamburgers/bar food
• Not eat on trays
• Not to offer 2 soups as choice of lunch. Would be ok if at least a 1/2 sandwich was offered
• The meals be prepared in a better kitchen in a better building.
• They serve certain kinds of food you don’t like like liver. But most of what they serve I like them.
• Well they do have what they call a vegetable medley that at times I think I could do without

Recreation

• A larger space
• Having more of them available.
• It would be nice if we can have them and not pay for them. Because a lot of people here are low income like I am. So we can have them when we want them.
• Later in the morning.
• make them available at more hours out of the day
• More classes
• More music. Lyrical and singing
• more sit down exercise
• New building to provide more space, Currently some programs are in the basement and some in the dining room.
• Offer more classes. Only seen people do Tai Chi
• People who attend being more friendly
• Probably give me more time to participate, but I can't really think of a thing I would change.
• They don't fit my interests
• They offer so many options already
• This is difficult to answer as the Center offers such a variety. Newer facility that includes a swimming pool.
• Time schedules
• use to go. YMCA sponsored cardio, I think it was great

Transportation

• Have it more available
• I wish we'd have a bigger vehicle so those in wheelchairs can fit easily.

Supportive Services

• A nurse on staff would be desirable.
• Not enough transportation
• Nothing
• The building needs to be changed. Currently the Center is in an old Post Office building. Space is very limited. Rooms are small. Ramp on one side of the building and the main parking is on the opposite side of the building. The facilities need to be updated.
• There working space would be improved. The Center is located in an old Post Office. There is one ramp but the majority of the parking is on the opposite side. Space for exercise classes are offered in the basement and often in the dining hall. Office space is cramped and storage is very limited. The work the support staff does in such limited space is tremendous. And they are always so pleasant to anyone who stops by. The person is more important than any other activity.
• Treat everyone the same, and make meetings on time

Why haven’t you invited a friend to the center?

• because they were already going
• Do not have anyone to invite
• Don't tell people what they should do and meet people there
• Food at center is bad
• Friend passed
• Go with sick husband
• goes with friends
• Goes with wife and meets friends there
• Husband goes with
• Husband invited
• If and when I have eaten at the Center, I eat with friends.
• Usually I go to the Center for assistance of some sort. From using the loan closet to attending a class or just general information.
• never think to
• People there aren't very nice
• Too busy
APPENDIX 3

QUESTIONNAIRE

Please note that the questionnaire was administered using Qualtrics software; this is the Microsoft Word download of the items. Due to this difference, some of the words have been automatically shortened by the software conversion process, and the skip patterns are described, rather than automatic (which was the case with the actual software used). In general, instructions to the callers are provided in all caps and within brackets, while the automatic skip patterns are described in shaded boxes. Please contact the authors if you have questions about the questionnaire.

9 County - AOoA Senior Centers

Q1 [PLEASE IDENTIFY WHO IS CALLING]

- Valerie (1)
- Stacey (2)
- Hannah M. (3)
- Kimmi (4)
- Luyna (5)
- Hannah W. (6)
- Jonathon (7)

Q2 Hello, may I speak to [NAME]? [IF THEY’RE NOT AVAILABLE, ASK FOR A BETTER TIME TO CALL] My name is [YOUR NAME] and I’m calling from Miami University. You should have received a letter in the mail explaining our research study, do you remember if you received that letter? As a reminder, we're contacting people to assess satisfaction with their local senior center, and learn about some of their other experiences. It should take no more than 20 minutes. Your participation is voluntary, you may skip questions you don't want to answer, and you may stop at any time. Results of the research will not include any identifying information. Would now be a good time for us to talk about this? [IF NOT, ASK FOR A BETTER TIME TO CALL AND RECORD ON SPREADSHEET]

- Yes, proceed (1)
- No, refusal (2)
Q3 [IF REFUSAL]
Your opinions are really important to us. Instead of talking now, may we send you a link by email to fill out the survey online?

[IF YES, ENTER EMAIL ADDRESS BELOW]

Q4 [IF STILL REFUSAL]
I understand. Can I ask you just one question about your senior center?

[IF YES]
Overall, are you satisfied with your senior center? Would you say Definitely Yes, Probably Yes, Probably No, or Definitely No?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q5a [IDENTIFY THE COUNTY FROM WHICH THE RESPONDENT WAS, USING THE SPREADSHEET]

- Defiance (1)
- Erie (2)
- Fulton (3)
- Henry (4)
- Lucas (5)
- Ottawa (6)
- Paulding (7)
- Sandusky (8)
- Williams (9)
- Wood (10)
Q5 According to our records, you attend a senior center in [COUNTY FROM SPREADSHEET] county, is that correct? [IF NOT, ASK WHICH COUNTY AND MARK THE ONE THEY IDENTIFY]. We'd like you to answer all of our questions with the senior center that you attend the most in mind.

- Defiance (1)
- Erie (2)
- Fulton (3)
- Henry (4)
- Lucas (5)
- Ottawa (6)
- Paulding (7)
- Sandusky (8)
- Williams (9)
- Wood (10)
- Refused (88)

Q6 [IDENTIFY THE RESPONDENT'S GENDER - FROM SPREADSHEET/NAME/VOICE]

- Male (0)
- Female (1)
- Don't Know (7)
Q7 The first few questions are about meals that may be offered at your senior center.

Does your senior center provide meals?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)

Skip To: End of Block If Q7 = 0
Skip To: End of Block If Q7 = 7

Q8 In the last year, did you eat a meal at the senior center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)

Skip To: End of Block If Q8 = 0
Skip To: End of Block If Q8 = 7
Skip To: End of Block If Q8 = 8
Q9 In general, how often do you eat a meal at the senior center? Would you say every day, more than once a week, once a week, 1-3 times per month, every few months, or about 1 time each year?

- Every Day (1)
- More than once a week (2)
- Once a week (3)
- 1-3 times per month (4)
- Every few months (5)
- About 1 time each year (6)
- Don't Know (7)
- Refused (8)

Q10 The next few questions are about your satisfaction with the meals served at the center. Are you satisfied with…[ITEM]

[REPEAT THE QUESTION STEM AND OPTIONS FOR AT LEAST THE FIRST 3 ITEMS]
<table>
<thead>
<tr>
<th></th>
<th>Definitely Yes (4)</th>
<th>Probably Yes (3)</th>
<th>Probably No (2)</th>
<th>Definitely No (1)</th>
<th>Don't Know (7)</th>
<th>Refused (8)</th>
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</thead>
<tbody>
<tr>
<td>The types of food offered at the center (1)</td>
<td>○</td>
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<td>The taste of the food (2)</td>
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<td>The time of day meals are served (3)</td>
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<td>How often the meals are served on time (4)</td>
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<tr>
<td>The amount of food you are served (5)</td>
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<tr>
<td>The food you are served matching what’s on the menu (6)</td>
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<td>The look and surroundings of where you eat your meals at the center (7)</td>
<td>○</td>
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<td>How seriously the staff take concerns or problems with the food (8)</td>
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<tr>
<td>The service that you receive at mealtimes (9)</td>
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<tr>
<td>The suggested donation for the meals served at the center (10)</td>
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</tbody>
</table>

Q11 If you could change one thing about the meals provided by the center, what would it be?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

End of Block: Introduction and meals

Start of Block: Recreational Activities
Q12 [IF THE INDIVIDUAL IS NOT ABLE TO COMPLETE THE INTERVIEW, USE THIS LINK TO JUMP TO THE NEXT QUESTION BLOCK]

- End Interview (1)

Skip To: End of Block if Q12 = 1

Q13 [RECREATIONAL ACTIVITIES] Next, I’m going to ask about some activities that you may have participated in at your senior center. This could include playing games at the center, participating in activities or sports, attending fitness classes, or going on outings with the center.

Q14 Does your senior center offer any activities?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)

Skip To: End of Block if Q14 = 0
Skip To: End of Block if Q14 = 7

Q15 In the last year, have you participated in any of these activities?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
Q16 In general, how often do you participate in activities at the center? Would you say every day, more than once a week, once a week, 1-3 times per month, every few months, or about 1 time each year?

- Every Day (1)
- More than once a week (2)
- Once a week (3)
- 1-3 times per month (4)
- Every few months (5)
- About 1 time each year (6)
- Don't Know (7)
- Refused (8)

Q17 Now I’m going to ask you about specific types of activities your center may offer. If your center does not offer an activity that I ask about, please tell me.

In the last year, did you play cards or games such as bingo, bridge, or chess, checkers, dominoes, trivia, or board games at your senior center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)
Q18 Are you satisfied with the cards, chess, bingo, and games offered by the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q19 In the last year, did you do any arts, crafts, or hobbies such as painting, quilting, or woodworking at your senior center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)

Skip To: Q21 If Q19 = 0
Skip To: Q21 If Q19 = 7
Skip To: Q21 If Q19 = 8
Skip To: Q21 If Q19 = 9

63
Q20 Are you satisfied with the arts, crafts and hobbies offered by the center?
- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q21 In the last year, did you attend any discussion groups, such as a book club or a current events discussion group at your senior center?
- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)

Skip To: Q23 If Q21 = 0
Skip To: Q23 If Q21 = 7
Skip To: Q23 If Q21 = 8
Skip To: Q23 If Q21 = 9

Q22 Are you satisfied with the discussion groups offered by the center?
- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)
Q23 In the last year, did you take part in outdoor activities at your senior center, such as bird watching, camping, canoeing, gardening, fishing, or hiking?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)

Skip To: Q25 If Q23 = 0
Skip To: Q25 If Q23 = 7
Skip To: Q25 If Q23 = 8
Skip To: Q25 If Q23 = 9

Q24 Are you satisfied with the outdoor activities offered by the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)
Q25 In the last year, did you take part in any sports organized by your senior center, such as basketball, golf, a walking group, softball, swimming, Wii bowling, pickle ball, Tai Chi, or corn hole?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)

Skip To: Q27 If Q25 = 0
Skip To: Q27 If Q25 = 7
Skip To: Q27 If Q25 = 8
Skip To: Q27 If Q25 = 9

Q26 Are you satisfied with the organized sports offered by the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q27 In the last year, did you attend any educational or training courses offered by the center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)
Q28 Are you satisfied with the educational or training courses offered by the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q29 In the last year, did you take part in any outings offered by your senior center such as going to a baseball game, the movies, or a restaurant?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)
Q30 Are you satisfied with the outings offered by the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q31 In the last year, did you take part in dancing activities, such as line dancing, offered by the center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)

Skip To: Q33 If Q31 = 0
Skip To: Q33 If Q31 = 7
Skip To: Q33 If Q31 = 8
Skip To: Q33 If Q31 = 9
Q32 Are you satisfied with the opportunities to dance offered by the senior center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q33 In the last year, did you attend any shows, performances, or musical concerts with your senior center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)

Q34 Are you satisfied with the shows, performances, or musical concerts offered by the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)
Q35 In the last year, did you take part in any volunteer opportunities offered by your senior center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)

Skip To: Q37 If Q35 = 0
Skip To: Q37 If Q35 = 7
Skip To: Q37 If Q35 = 8
Skip To: Q37 If Q35 = 9

Q36 Are you satisfied with the volunteer opportunities offered by the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q37 In the last year, did you use a computer, tablet, smart phone, or other device provided by your senior center, or did you use your own device on the senior center's Wi-Fi or internet?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)
Q38 Are you satisfied with the opportunities to use a computer or other device at the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q39 In the last year, did you attend any special events, like holiday parties, picnics, county-wide Senior Day or Senior Day at the Fair, hosted by the center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Activity (9)
Q40 Are you satisfied with the special events hosted by the center?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q41 Now we have a few questions specifically about your fitness, and fitness classes at the center.

For the next question, please think back about your experiences with physical activity and exercise throughout your entire life. Using a scale from 1 to 5, where 1 is not at all active and 5 is very active, how would you describe your physical activity throughout your lifetime?

- 1= Not at all active (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5= Very active (5)
- Don't Know (7)
- Refused (8)
Q42 Using the same scale, where 1 is not at all active and 5 is very active, how physically active would you say you are now?

- 1= Not at all active (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5= Very active (5)
- Don't Know (7)
- Refused (8)

Q43 About how many years would you say you’ve been as physically active as you are now?

________________________________________________________________

Q44 Does your senior center offer any exercise or fitness classes?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)

Skip To: Q51 If Q44 = 0
Skip To: Q51 If Q44 = 7
Q45 In the last year, did you take part in any exercise or fitness classes at your senior center?
- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)

Skip To: Q48a If Q45 = 0
Skip To: Q48a If Q45 = 7
Skip To: Q48a If Q45 = 8

Q46 Are you satisfied with the exercise or fitness classes offered by the center?
- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q47 In general, how often do you participate in your center’s fitness classes? Would you say every day, more than once a week, once a week, 1-3 times per month, every few months, or about 1 time each year?
- Every Day (1)
- More than once a week (2)
- Once a week (3)
- 1-3 times per month (4)
- Every few months (5)
- About 1 time each year (6)
- Don't Know (7)
- Refused (8)
Q48 Have you *ever* participated in a fitness class at your senior center?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)

Q41a For the next question, please think back about your experiences with physical activity and exercise throughout your entire life. Using a scale from 1 to 5, where 1 is not at all active and 5 is very active, how would you describe your physical activity throughout your lifetime?

- 1= Not at all active (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5= Very active (5)
- Don't Know (7)
- Refused (8)
Q42a Using the same scale, where 1 is not at all active and 5 is very active, how physically active would you say you are now?

- 1= Not at all active (1)
- 2= (2)
- 3 (3)
- 4= (4)
- 5= Very active (5)
- Don’t Know (7)
- Refused (8)

Q43a About how many years would you say you’ve been as physically active as you are now?

____________________________________________________________

Skip To: Q49 If Q43a Is Not Empty

Q48a Have you ever participated in a fitness class at your senior center?

- Yes (1)
- No (0)
- Don’t Know (7)
- Refused (8)

Q49 Now I'd like to ask you about reasons why you don't participate in fitness classes at the senior center. Even if you exercise somewhere else or at home, please tell me if any of the following are reasons why you don't participate in fitness classes at the center, by saying yes or no.
<table>
<thead>
<tr>
<th>Question</th>
<th>Definitely Yes (5)</th>
<th>Probably Yes (1)</th>
<th>Probably No (2)</th>
<th>Definitely No (6)</th>
<th>Don't Know (3)</th>
<th>Refused (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are concerns about safety a reason why you don't participate? (1)</td>
<td></td>
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<tr>
<td>Is your confidence in your ability to perform exercises a reason why you don't participate? (2)</td>
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<td>Is pain related to an existing condition a reason why you don't participate? (3)</td>
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<td>Is your current health a reason why you don't participate? (4)</td>
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<td>Would your level of confidence in the fitness instructor be a reason why you don't participate? (5)</td>
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<td>Are the times classes are offered a reason why you don't participate? (6)</td>
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<tr>
<td>Are the types of classes offered a reason why you don't participate? (7)</td>
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</tbody>
</table>

Q50 Please tell me if any of the following would increase your likelihood of participating in fitness classes at the center.
<table>
<thead>
<tr>
<th>Would the belief that it would increase your strength or balance increase your likelihood of participating? (1)</th>
<th>Definitely Yes (5)</th>
<th>Probably Yes (1)</th>
<th>Probably No (2)</th>
<th>Definitely No (6)</th>
<th>Don't Know (3)</th>
<th>Refused (4)</th>
</tr>
</thead>
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<tr>
<td>Would the belief that it would improve your overall health and well-being increase your likelihood of participating? (2)</td>
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<td>Would the belief that it would reduce the amount of medication you need to take increase your likelihood of participating? (3)</td>
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<td>Question</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Would the belief that it would help you maintain your independence increase your likelihood of participating? (4)</td>
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<tr>
<td>Would classes that are tailored to fit your needs increase your likelihood of participating? (5)</td>
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<tr>
<td>Would the opportunity to socialize with friends increase your likelihood of participating? (6)</td>
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<td>○</td>
</tr>
<tr>
<td>Would a higher level of confidence in the fitness instructor increase your likelihood of participating? (7)</td>
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</tbody>
</table>
Q51 Now I would like you to think about your overall experience participating in recreational activities at the center, not just fitness classes. If you could change one thing about the recreational activities provided by the center, what would it be?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

End of Block: Recreational Activities

Start of Block: Transportation

Q52 [IF THE INDIVIDUAL IS NOT ABLE TO COMPLETE THE INTERVIEW, USE THIS LINK TO JUMP TO THE NEXT QUESTION BLOCK]

☐ End Interview (1)

Skip To: End of Block If Q52 = 1

Q53 [TRANSPORTATION]
Now I’m going to ask you some questions about transportation services offered by some senior centers.

Does your senior center offer any transportation services?

☐ Yes (1)
☐ No (0)
☐ Don't Know (7)
☐ Refused (8)
Q54 In the last year, have you used the center’s transportation services?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)

Q55 In general, how often do you use the center’s transportation services? Would you say every day, more than once a week, once a week, 1-3 times per month, every few months, or about 1 time each year?

- Every Day (1)
- More than once a week (2)
- Once a week (3)
- 1-3 times per month (4)
- Every few months (5)
- About 1 time each year (6)
- Don't Know (7)
- Refused (8)
Q61 Overall, are you satisfied with your center's transportation services?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q63 If you could change one thing about transportation services provided by the center, what would it be?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

End of Block: Transportation

Start of Block: Supportive services

Q64 [IF THE INDIVIDUAL IS NOT ABLE TO COMPLETE THE INTERVIEW, USE THIS LINK TO JUMP TO THE NEXT QUESTION BLOCK]

- End Interview (1)

Skip To: End of Block if Q64 = 1

Q65 [SUPPORTIVE SERVICES]
Now I’m going to ask you a few questions about supportive services at your senior center.
Supportive services could include help filling out official documents, such as applications for SNAP (food stamps); help with utilities; or help with your taxes, Medicare, Medicaid, or prescription drugs.

Does your senior center offer supportive services?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)

Q66 In the past year, have you used any of these services?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
Q67 In general, how often do you use the center’s supportive services? Would you say every day, more than once a week, once a week, 1-3 times per month, every few months, or about 1 time each year?

- Every Day (1)
- More than once a week (2)
- Once a week (3)
- 1-3 times per month (4)
- Every few months (5)
- About 1 time each year (6)
- Don't Know (7)
- Refused (8)

Q68 Now I’d like to ask a few questions about the different types of services you might have used. If your center does not offer a service that I ask about, please tell me.

In the last year, did anyone at the center help you fill out official documents or a government application, such as an application for a monthly food box or utilities assistance?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Service (9)

Skip To: Q70 If Q68 = 0
Skip To: Q70 If Q68 = 7
Skip To: Q70 If Q68 = 8
Skip To: Q70 If Q68 = 9
Q69 Are you satisfied with this service?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don't Know (7)
- Refused (8)

Q70 In the last year, did anyone from the center go with you to a medical appointment?

- Yes (1)
- No (0)
- Don't Know (7)
- Refused (8)
- Center Doesn't Offer Service (9)

Skip To: Q72 If Q70 = 0
Skip To: Q72 If Q70 = 7
Skip To: Q72 If Q70 = 8
Skip To: Q72 If Q70 = 9
Q71 Are you satisfied with this service?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don’t Know (7)
- Refused (8)

---

Q72 In the last year, did anyone from the center help you with any issues related to Medicare, Medicaid, or Social Security?

- Yes (1)
- No (0)
- Don’t Know (7)
- Refused (8)
- Center Doesn’t Offer Service (9)

Skip To: Q76 If Q72 = 0
Skip To: Q76 If Q72 = 7
Skip To: Q76 If Q72 = 8
Skip To: Q76 If Q72 = 9

Q73 Are you satisfied with this service?

- Definitely Yes (4)
- Probably Yes (3)
- Probably No (2)
- Definitely No (1)
- Don’t Know (7)
- Refused (8)
Q76 Now think about the help you’ve received at the center with these services overall. Are you satisfied with …[ITEM]?

**REPEAT THE SCALE AS NEEDED**

<table>
<thead>
<tr>
<th></th>
<th>Definitely Yes (4)</th>
<th>Probably Yes (3)</th>
<th>Probably No (2)</th>
<th>Definitely No (1)</th>
<th>Don't Know (7)</th>
<th>Refused (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How efficiently the senior center staff are able to help you when you need it (1)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>How you are treated by the senior center staff when you go to them for help (2)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>The amount of help the senior center staff are able to provide (3)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>
Q77 If you could change one thing about supportive services provided by the center, what would it be?

________________________________________________________________
________________________________________________________________
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End of Block: Supportive services

Start of Block: Outcomes and miscellaneous

Q78 [IF THE INDIVIDUAL IS NOT ABLE TO COMPLETE THE INTERVIEW, USE THIS LINK TO JUMP TO THE END OF THE SURVEY]

☐ End Interview (1)

Skip To: Q97 If Q78 = 1

Q79 [OUTCOME ASSESSMENT] The next questions are about your life since you started attending the senior center. I’m going to read you several statements. If a statement is true for you, please say yes. If it is not true for you, please say no.

Because you go to the senior center, you … [ITEM]

[REPEAT THE RESPONSE OPTIONS FOR THE FIRST TWO ITEMS; REPEAT “BECAUSE YOU GO TO THE SENIOR CENTER, YOU…” FOR AT LEAST 3 STATEMENTS]
<table>
<thead>
<tr>
<th></th>
<th>Definitely Yes (4)</th>
<th>Probably Yes (3)</th>
<th>Probably No (2)</th>
<th>Definitely No (1)</th>
<th>Don't Know (7)</th>
<th>Refused (8)</th>
<th>Not applicable (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do more volunteer work. Would you say yes or no? (1)</td>
<td></td>
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<tr>
<td>See friends more often. Would you say yes or no? (2)</td>
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<tr>
<td>Have made new friends (3)</td>
<td></td>
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<tr>
<td>My health has improved (4)</td>
<td></td>
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<tr>
<td>Eat meals that are better for you (5)</td>
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<tr>
<td>Have more energy (6)</td>
<td></td>
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<tr>
<td>Feel happier or more satisfied with your life (7)</td>
<td></td>
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<tr>
<td>Have something to look forward to (8)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know where to get help if you need a service, such as a ride to the doctor (9)</td>
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<tr>
<td>Feel more independent (10)</td>
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<tr>
<td>Have experienced positive changes in your life (11)</td>
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<tr>
<td>Have learned new things (12)</td>
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<tr>
<td>Worry less about problems that may come up (13)</td>
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<td>Are more physically active (14)</td>
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<td>Feel more engaged in your community (15)</td>
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<tr>
<td>Feel more in control of your life (16)</td>
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<tr>
<td>I feel more socially connected (17)</td>
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<tr>
<td>I have gained knowledge on active aging trends (18)</td>
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<tr>
<td>I feel like mind is more active (19)</td>
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<tr>
<td>I have received support for caring for my spouse/partner/friend (20)</td>
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</tbody>
</table>

Q80 [LONELINESS] Now we'd like to ask some questions about several different aspects of your life in general, your health, and your experiences. For the next questions, please tell me...

How much of the time do you feel… [ITEM]? [REPEAT QUESTION STEM AND SCALE FOR AT LEAST THE FIRST 3 ITEMS]
<table>
<thead>
<tr>
<th>Question</th>
<th>Often (1)</th>
<th>Some of the time (2)</th>
<th>Hardly Ever or Never (3)</th>
<th>Don't Know (7)</th>
<th>Refused (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>You lack companionship? Would you say often, some of the time, or hardly ever or never (1)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Left out? Would you say often, some of the time, or hardly ever or never (2)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Isolated from others? (3)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>That there are people you can talk to? (4)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>That there are people who really understand you? (5)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>That there are people you feel close to? (6)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Part of a group of friends? (7)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>That you have a lot in common with the people around you? (8)</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>
Q81 [SELF-RATED HEALTH]
Would you say your health is excellent, very good, good, fair, or poor?

- Excellent (5)
- Very Good (4)
- Good (3)
- Fair (2)
- Poor (1)
- Don't Know (7)
- Refused (8)

Q82 [GENERAL/OVERALL] Now I’d like to ask you some questions about the senior center overall.

Approximately how long have you been going to the center? Did you start going in the past month, in the past 3 months, in the past 6 months, in the past year, in the past 3 years, or more than 3 years ago?

- in the past month (1)
- in the past 3 months (2)
- in the past 6 months (3)
- in the past year (4)
- in the past 3 years (5)
- more than 3 years ago (6)
- Don't know (7)
- Refused (8)
Q83 When was the last time you went to the senior center? Was it within the last week, within the last month, within the last 3 months, or more than 3 months ago?

- Within the last week (1)
- Within the last month (2)
- Within the last 3 months (3)
- More than 3 months ago (4)
- Don't know (7)
- Refused (8)

Q84 In general, how often do you go to the senior center? Would you say every day, more than once a week, once a week, 1-3 times per month, every few months, or 1 time each year?

- Every Day (1)
- More than once a week (2)
- Once a week (3)
- 1-3 times per month (4)
- Every few months (5)
- 1 time each year (6)
- Don't know (7)
- Refused (8)
Q85 Have you ever invited a friend to go to the senior center with you?

- Yes (1)
- No (0)
- Don't know (7)
- Refused (8)

Skip To: Q87 If Q85 = 1
Skip To: Q87 If Q85 = 7
Skip To: Q87 If Q85 = 8

Q86 Why not?

________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

Q87 [DEMOGRAPHICS, MISCELLANEOUS]
What is your current age?

________________________________________________________________

Q88 What is the highest grade of school you have completed, or the highest degree you have received?

________________________________________________________________
Q89 What race do you consider yourself to be, White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, or something else?  
[CODING: SELECT ALL THAT APPLY FOR MULTI-RACIAL INDIVIDUALS]

- White (1)
- Black/African American (2)
- Asian (3)
- American Indian/Alaska Native (4)
- Native Hawaiian/Pacific Islander (5)
- Something else (6)
- Don't know (7)
- Refused (8)

Q90 Do you consider yourself Hispanic or Latino?

- Yes (1)
- No (0)
- Don't know (7)
- Refused (8)

Q91 Now we’d like to ask you a few questions about your driving habits.
Do you currently drive yourself places when you need to?

- Yes (1)
- No (0)
- Don't know (7)
- Refused (8)

Skip To: Q94 If Q91 = 0
Skip To: Q94 If Q91 = 7
Skip To: Q94 If Q91 = 8

Q92 When was the last time you drove? Was it within the last week, within the last month, within the last 3 months, or longer than 3 months ago?

- Within the last week (1)
- Within the last month (2)
- Within the last three months (3)
- Longer than three months ago (4)
- Never drove (vol) (5)
- Don't know (7)
- Refused (8)

Skip To: Q94 If Q92 = 3
Skip To: Q94 If Q92 = 4
Skip To: Q94 If Q92 = 5
Skip To: Q94 If Q92 = 7
Skip To: Q94 If Q92 = 8
Q93 Now I have some questions about driving situations people sometimes avoid. In the last month, did you ever avoid driving… [ITEM]

<table>
<thead>
<tr>
<th></th>
<th>Yes (1)</th>
<th>No (2)</th>
<th>Don't know (3)</th>
<th>Refused (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At night (1)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>On busy roads (2)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>In bad weather (3)</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tbody>
</table>

Q94 The next two questions are about your experiences growing older.

On the whole, would you say that growing older has been a very positive experience, mainly positive experience, neither a negative nor a positive experience, a mainly negative experience, or a very negative experience?

○ Very positive (1)
○ Mainly positive (2)
○ Neither negative nor positive (3)
○ Mainly negative (4)
○ Very negative (5)
○ Don't know (7)
○ Refused (8)

Q95 Now, I’m going to ask you specific things about growing older. Answer choices include yes and no. Now that I am older, I…

[REPEAT QUESTION STEM AND RESPONSE OPTIONS FOR AT LEAST THE FIRST 3 ITEMS]
<table>
<thead>
<tr>
<th></th>
<th>Yes (1)</th>
<th>No (0)</th>
<th>Don't know (7)</th>
<th>Refused (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have less stress in my life.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>Would you say yes or no? (1)</td>
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<tr>
<td>Feel less healthy.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>Would you say yes or no? (2)</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Feel more respected</td>
<td>o</td>
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<td>o</td>
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<tr>
<td>Feel less needed by others</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>(4)</td>
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<tr>
<td>Have more time to do the things I</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
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<tr>
<td>want to do (5)</td>
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<tr>
<td>Feel like my relationships</td>
<td>o</td>
<td>o</td>
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<td>o</td>
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<tr>
<td>with others have gotten better</td>
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<tr>
<td>(6)</td>
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</tbody>
</table>
Q96 How difficult is it for you or your family to meet monthly payments on your bills? Would you say not at all difficult, not very difficult, somewhat difficult, very difficult, or completely difficult?

- Not at all difficult (1)
- Not very difficult (2)
- Somewhat difficult (3)
- Very difficult (4)
- Completely difficult (5)
- Don't know (7)
- Refused (8)

Q97 [IF THE INTERVIEW WAS TERMINATED OR RESCHEDULED, DESCRIBE BELOW]

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

End of Block: Outcomes and miscellaneous