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Madison Helmbold Date

Characteristics of Area Agencies on Aging (AAA) and their attitudes toward engaging in research, knowledge of research-related topics, and ability to engage in research activities

By

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Epidemiology

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By

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B.S.
Mercer University
2023

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Abstract

Characteristics of Area Agencies on Aging (AAA) and their attitudes toward engaging in research, knowledge of research-related topics, and ability to engage in research activities
By Madison Helmbold

Introduction: Area Agencies on Aging (AAA) provide services to support older adults and their caregivers through grants from the National Family Caregiver Support Program (NFCSP). Limited research exists on the attitudes, knowledge, and ability of AAAs to participate in research in relation to these characteristics. This analysis of the CARE Network Baseline Survey for AAA Providers aims to fill this research gap by identifying associations between AAA characteristics and AAAs' attitudes toward engaging in research, knowledge of research-related topics, and ability to engage in research. **Methods:** Using responses from 65 AAAs, we ran a bivariate analysis with tests of statistical significance for each of our research questions. We obtained p-values (95% level of significance) and odds ratios from Fisher's Exact tests to analyze the associations between AAA characteristics and their attitudes, knowledge, and ability to engage in research. **Results:** Only budget size and interest in engaging in research were significantly associated ($p = 0.008$) among attitudes toward engaging in research and AAA characteristics. We found significantly lower odds of having knowledge of survey items (OR = 0.30 [0.10, 0.89]; $p = 0.038$), data sets (OR = 0.20 [0.06, 0.68]; $p = 0.012$), and study design (OR = 0.28 [0.09, 0.95]; $p = 0.049$) in rural AAAs. Similarly, we found that AAAs serving predominantly rural areas had significantly lower odds of engaging the target population (OR = 0.31 [0.11, 0.89]; $p = 0.040$), collecting qualitative data (OR = 0.31 [0.11, 0.92]; $p = 0.040$), and communicating findings (OR = 0.24 [0.08, 0.77]; $p = 0.017$) compared to those not serving predominantly rural areas. **Discussion**: Of the AAA characteristics including budget size, HHS region, organization structure, and predominantly rural area served, service to a predominantly rural area was most consistently significantly associated with AAAs' knowledge and ability of research. This highlights the necessity to address challenges rural AAAs face in participating in research. Increasing AAA engagement in research can improve their understanding of caregivers' needs and allow them to apply evidence-based interventions which improve the well-being of caregivers and the older adults they care for.

Keywords: Area Agency on Aging (AAA), caregiver, attitudes, knowledge, ability, engagement in research

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ABSTRACT

Introduction: Area Agencies on Aging (AAA) provide services to support older adults and their caregivers through grants from the National Family Caregiver Support Program (NFCSP). Limited research exists on the attitudes, knowledge, and ability of AAAs to participate in research in relation to these characteristics. This analysis of the CARE Network Baseline Survey for AAA Providers aims to fill this research gap by identifying associations between AAA characteristics and AAAs' attitudes toward engaging in research, knowledge of research-related topics, and ability to engage in research. **Methods:** Using responses from 65 AAAs, we ran a bivariate analysis with tests of statistical significance for each of our research questions. We obtained p-values (95% level of significance) and odds ratios from Fisher's Exact tests to analyze the associations between AAA characteristics and their attitudes, knowledge, and ability to engage in research. **Results:** Only budget size and interest in engaging in research were significantly associated ($p = 0.008$) among attitudes toward engaging in research and AAA characteristics. We found significantly lower odds of having knowledge of survey items (OR = 0.30 [0.10, 0.89]; $p = 0.038$), data sets (OR = 0.20 [0.06, 0.68]; $p = 0.012$), and study design (OR = 0.28 [0.09, 0.95]; $p = 0.049$) in rural AAAs. Similarly, we found that AAAs serving predominantly rural areas had significantly lower odds of engaging the target population (OR = 0.31 [0.11, 0.89]; $p = 0.040$), collecting qualitative data (OR = 0.31 [0.11, 0.92]; $p = 0.040$), and communicating findings (OR = 0.24 [0.08, 0.77]; $p = 0.017$) compared to those not serving predominantly rural areas. **Discussion:** Of the AAA characteristics including budget size, HHS region, organization structure, and predominantly rural area served, service to a predominantly rural area was most consistently significantly associated with AAAs' knowledge and ability of research. This highlights the necessity to address challenges rural AAAs face in participating in research. Increasing AAA engagement in research can improve their understanding

of caregivers' needs and allow them to apply evidence-based interventions which improve the well-being of caregivers and the older adults they care for.

Keywords: Area Agency on Aging (AAA), caregiver, attitudes, knowledge, ability, engagement in research

INTRODUCTION

The National Alliance for Caregiving (NAC) estimates that there were about 53 million family caregivers in the United States in 2020 (AARP & NAC, 2020). Compared to non-family caregivers, family caregivers report higher rates of stress, anxiety, and depression as they must balance caregiving duties with the stresses of daily living, putting them at increased risk for adverse mental and physical health outcomes (Family Caregiver Alliance, 2024a). To mitigate the negative impacts of family caregiving and support the growing population of caregivers, Congress passed the Older Americans Act (OAA) to provide state and substate entities like Area Agencies on Aging (AAAs) with funds to support older adults and their caregivers. The National Family Caregiver Support Program (NFCSP), established through the OAA, provides this funding to grantees who provide the following caregiving services:

- "Information to caregivers about available services;
- assistance to caregivers in gaining access to the services;
- individual counseling, organization of support groups, and caregiver training;
- respite care; and
- supplemental services, on a limited basis" (ACL, 2025).

AAAs are public or private non-profit agencies that address the regional and local needs and concerns of older persons by coordinating and offering support services. In addition to services for

older adults, AAAs provide a variety of evidence-based programs to support caregivers through common services like respite care, information and referrals to connect families with providers to establish caregiving plans, individual counseling and support groups, emergency assistance, and caregiver education and training (USAging, 2022; USAging, 2025). Because AAAs are direct service providers for older adults and their caregivers, they are uniquely positioned to conduct research to improve the efficacy of the programs and services being offered. Despite their positioning, many AAAs have diminished research capacities due to limited funding and staffing barriers – this is especially true for AAAs in rural areas. Understanding these barriers and the characteristics of AAAs with less interest, capacity, and prioritization of research engagement, as well as less knowledge and ability to engage in research, can provide opportunities for the NFCSP to address them through allocation of resources which increase funding or staff capacity for AAAs in rural areas. By maximizing engagement in research by AAAs and other entities involved with the NFCSP, they may gain a better understanding of caregivers' needs, in turn improving the well-being of both caregivers and the older adults they care for.

AAAs play a vital role in providing family caregivers and the older adults they care for with support. Engaging in research can further enhance the services AAAs provide as they will be better equipped to select and implement the most innovative and effective family caregiving interventions. However, literature which centers AAAs' perspectives in engaging in research is sparse. This sparsity can be attributed to research focusing primarily on the needs of AAAs in regard to their role in providing services to older adults and their caregivers (Lynn Ilardo, King, & Marie Zell, 2023). Other research explores caregiver assessments which AAAs conduct (Shugrue et al., 2019) but does not delve into specific components of their engagement in research. Similar studies reiterate the lack of resources AAAs have, especially when it comes to technical assistance, funding, and staffing

(Brady et al., 2022; Gallo, 2024; Pendergrast, 2021). While this information is beneficial in better understanding the resources available to AAAs which assist them in providing services, there remains limited research on the attitudes, knowledge, and ability of AAAs to engage in research.

Another common theme in the literature is the discussion of AAA resources in the context of service to rural versus urban areas. There is a consensus that rural AAAs face more barriers to serving older adults and their caregivers. Barriers for rural AAAs include lower budgets, less strong applicant pools, and limited staff capacity (Brady et al., 2022; National Association of Area Agencies on Aging, 2021; Nelson, 1980). This lack of resources is especially alarming as nearly half of AAAs serve predominantly rural areas (National Association of Area Agencies on Aging, 2021). In addition to the barriers AAAs in rural areas experience, older adults and their caregivers often face substantial financial and health barriers which limit their access to support services and increases their risk for adverse health outcomes (Bouldin et al., 2018). Research shows that AAAs have difficulties with providing equivalent levels of services for older adults and their caregivers in rural areas (Ozcan & Cotter, 1994), which provide insights into why rural residents are less likely to receive support services compared to their urban counterparts (Weaver & Roberto, 2021). Some findings suggest the reason for this gap in access to resources could be attributed to factors like smaller population sizes and smaller budgets in rural areas (National Association of Area Agencies on Aging, 2021), while other studies indicate that rural AAAs' limited resources cause their budget to be allocated for indirect services activities which are essential to basic functions of the agency (Nelson, 1980).

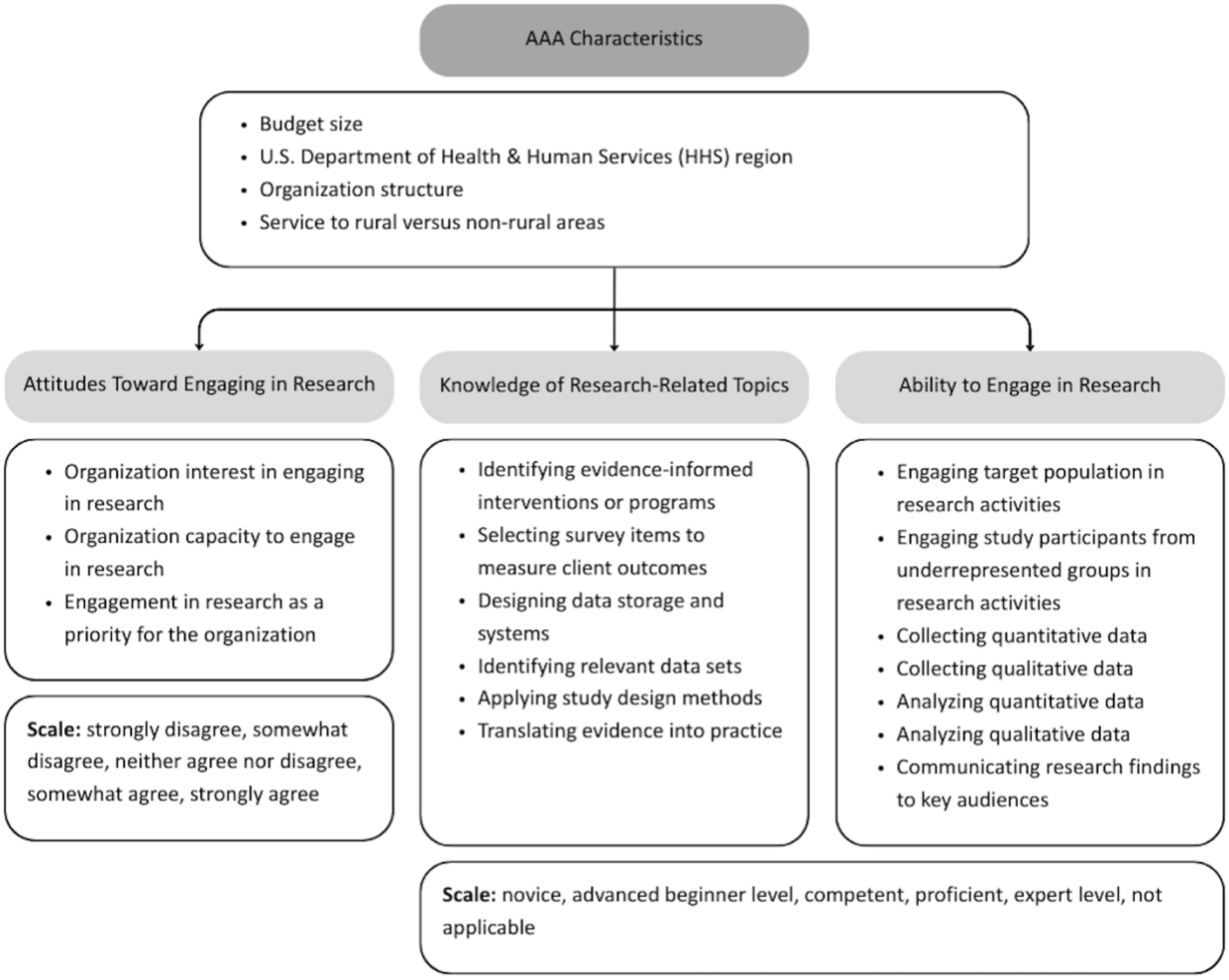
While studies exist which explore the general needs of AAAs in relation to their characteristics, often highlighting the needs of rural AAAs in terms of budget or other resources, there remain gaps in what is known about the capacity of these organizations to participate in research activities. Few, if any, studies investigate AAAs' attitudes, knowledge, and ability to engage in research in relation to characteristics beyond rural area served. Other important characteristics of

AAAs which may influence their engagement in research include budget size, area served, and organization structure. While associations have been identified between lower budgets, rural areas, and greater need for other resources (Brady et al., 2022; National Association of Area Agencies on Aging, 2021; Nelson, 1980), these characteristics in relation to engagement in research have been broadly understudied. Furthermore, AAAs' organization structure, which can be categorized as a county, city, regional planning council or council of governments, private, or nonprofit (ACL, 2024), may impact AAAs' ability to engage in research activities due to policies or lack of resources depending on the structure.

To address these knowledge gaps, research on the barriers that influence AAAs' participation in research is needed. In doing so, targeted interventions that address these barriers can be enacted. Surveys, like the one this research is based on, are effective tools for measuring engagement in research as they are able to accurately measure various variables like attitudes toward engaging in research, knowledge of research-related topics, and ability to engage in research activities among AAA providers. Figure 1 illustrates the various topics our survey among AAA providers covered. Research supporting knowledge as a measure for research capacity examines how increasing research knowledge and skills has been shown to improve research capacity by also increasing the confidence and engagement with research in professionals or other staff of community organizations (Collins et al., 2023). In terms of existing research on engagement, one recent study begins to explore specifically how caregivers are engaged in research by discussing the balance of maintaining a low burden on caregivers in the research process with directly involving caregivers in the research – something which caregivers often find very beneficial (Aoun et al., 2017). Another study discusses the development of measures for AAAs' success, emphasizing that smaller AAAs may identify staff who have the skills to analyze data and will need increased technical assistance, funding, and staffing resources to adequately measure outcomes of services which they provide

(Gallo, 2024). While these more recent studies begin to touch on the topic of AAAs attitudes, knowledge, and ability related to engagement in research, the gap in research on factors such as attitudes toward engaging in research (i.e., interest, capacity, priority), knowledge of research-related topics, and ability to engage in research activities which influence AAAs' participation in caregiver research remains substantially large.

Figure 1. Area Agency on Aging (AAA) characteristics and measures for their attitude, knowledge, and ability to engage in research, drawn from the CARE Network Baseline Survey for National Family Caregiver Support Program (NFCSP) AAA Providers



To better understand characteristics of AAAs and similar caregiver or aging support entities' which may influence their attitudes, knowledge, and ability to participate in family caregiver research and address gaps in the research, we conducted a secondary analysis of data from the CARE

Network Baseline Survey for NFCSP AAA providers (Appendix). The Creating & Advancing Caregiving Research & Evidence (CARE) Network Project is funded by the by Administration for Community Living and aimed at establishing a unified and adaptable national infrastructure for family caregiving research across the NFCSP and Native American Caregiver Support Program (NACSP) network. The baseline survey, conducted by Emory University and USAging, was distributed to NFCSP AAA providers to address one of the CARE Network project's objectives to build the capacity of the NFCSP to participate in or conduct family caregiving research.

This secondary analysis of the survey data aims to fill in some of these knowledge gaps on the attitudes, knowledge, and ability of AAAs and other NFCSP providers to engage in caregiver research by further investigating characteristics which may lead to decreased engagement. The goal of the analysis is to identify associations between characteristics of AAAs and their attitude, knowledge, and ability to engage in caregiver research by addressing three research questions:

(1) Is there an association between characteristics of AAAs and their attitudes toward engaging in research?

(2) Is there an association between characteristics of AAAs and their knowledge of research-related topics?

(3) Is there an association between characteristics of AAAs and their ability to engage in research?

Answering these questions and better understanding characteristics of AAAs which impact their attitudes, knowledge, and ability to engage in caregiver research can help AAAs design, select, administer, and evaluate the most evidence-based interventions. Addressing barriers to engaging in research can benefit both AAAs and caregivers by increasing family caregiver involvement in research and by aiding the development of evidence-based services that improve caregiver well-being.

METHODS

Study Participants

This secondary analysis uses data from the CARE Network Baseline Survey for NFCSP AAA providers. The survey was distributed to AAAs with the purpose of better understanding their capacity to engage in research activities and programs to support family caregivers. While the target of the provider survey was AAAs, a separate survey was distributed to family caregiver researchers on January 3, 2025 and remained open until February 5, 2025. Although the NFCSP includes Title VI programs that serve Native American caregivers and State Units on Aging, the survey focused on AAA providers given the uniformity in who they serve.

Sampling Approach

The participants in the survey came from a sampling pool of 403 AAAs who provided their budget range on the most recent USAging survey of AAAs in September 2022 to December 2022. The National AAA Survey has been conducted regularly since 2007 by USAging, and aims to capture trends related to AAA services, funding, and partnerships (USAging, 2023). Our team split the AAAs into two groups using the cut point of median budget size (< $5 million or $5 million or greater) to enable the sample to include both smaller and larger AAAs. From each of these two groups, 50 AAAs were randomly selected for a total target sample of 100 AAAs. We also ensured that AAAs that provide grandfamily/kinship services were included as survey respondents. Directors of AAAs were recruited by emails sent by USAging leadership, and unique links to the survey were provided for each AAA. The AAA Director was allowed to pass the link on to the family caregiving program coordinator at the AAA, although this rarely happened as most survey respondents were the AAA directors. Only one response was allowed from each recruited AAA.

Survey

The survey, which consisted of tailored questions for AAAs, was estimated to take about 10 minutes to complete. Responses were recorded through Qualtrics, an online survey platform. The link to the Qualtrics survey was distributed through e-mail by Emory University on October 1, 2024 and remained open for four weeks until October 31, 2024. Reminder e-mails were sent to those who had not completed the survey after one week, two weeks, three weeks, and with a few days left before the deadline. The survey was approved by Emory University's Institutional Review Board (IRB). The AAAs who participated agreed to a digital consent at the beginning of the survey. All responses were confidential, and participation was voluntary. Those who completed the survey received a $40 Amazon gift card as compensation. Questions in the survey pertained to the organization's attitudes, knowledge, and ability to engage in family caregiving research. Questions were asked about the organization's attitudes toward research, research activities or partnerships in the last five years, and knowledge and ability on research topics or skills. Responses consisted mostly of close-ended questions, but there were optional open-ended responses for some of the questions. In the context of this survey, family caregivers were defined by the Older Americans Act, Title III-E as:

(1) those age 18 and older providing support to adults aged 60 and older;

(2) those age 18 and older caring for adults of any age living with Alzheimer's disease or a related disorder;

(3) older relative caregivers (age 55 and older) caring for children other than their own; and

(4) older relative caregivers (age 55 and older) of disabled adults ages 18-59 years which may include children of the older relative caregiver.

Participants were asked to answer questions from the perspective of their organization or team rather than their individual perspective to best understand AAAs' engagement in research. The specific survey questions and variables included in our analyses are listed in the Appendix.

Independent Variables

AAA characteristics included budget size, U.S. Department of Health and Human Services (HHS) region, organization structure, and predominate area of service. Budget size was dichotomized as less than $5 million or $5 million and greater. A total of 10 HHS regions included the following: Region 1 (CT, ME, MA, NH, RI, VT), Region 2 (NJ, NY, PR, VI), Region 3 (DE, DC, MD, PA, VA, WV), Region 4 (AL, FL, GA, KY, MS, NC, SC, TN), Region 5 (IL, IN, MI, MN, OH, WI), Region 6 (AR, LA, NM, OK, TX), Region 7 (IA, KS, MO, NE), Region 8 (CO, MT, ND, SD, UT, WY), Region 9 (AZ, CA, HI, NV, AS, CNMI, FSM, GU, MH, PW), and Region 10 (AK, ID, OR, WA) (IEA, 2024). Organization structures for AAAs could be part of city government, part of county government, part of a council of governments or regional planning and development agency, an independent, non-profit agency, or other. The variable to distinguish whether a AAA was serving a predominantly rural area or not (i.e. predominantly rural) was dichotomized by defining rural areas as a combination of the "predominantly rural" and the "predominantly remote or frontier" categories from the area served characteristic to explore differences in rural and non-rural AAAs. The AAAs that identified as serving "predominantly urban", "predominantly suburban", "a mix of urban and suburban", "a mix of suburban and rural", or "a mix of urban, suburban, and rural" areas were combined into a non-rural category.

Dependent Variables

Three dependent variables were identified by the baseline survey, including organization attitudes toward engaging in research, knowledge of research-related topics, and ability to engage in research activities. Each variable was used for one of the following three research questions. For further specification on attitudes toward engagement in research, research-related topics, and research activities, refer to Figure 1.

Research Question 1: Is there an association between characteristics of AAAs and their attitudes toward engaging in research?

To measure their attitudes toward engaging in research (not specific to any one topic or field), AAAs were asked about their interest in engaging in research, their capacity to engage in research, and if engaging in research was a priority for the organization. Engaging in research could include conducting research within the organization, participating in research that another organization is conducting, or partnering in research with another organization, such as a university research center. Respondents could rate their agreement with each question through levels of "strongly disagree", "somewhat disagree", "neither agree nor disagree", "somewhat agree", or "strongly agree". We dichotomized the variable to account for small sizes in the tables by combining responses for "strongly disagree", "somewhat disagree", and "neither agree nor disagree" into one category and combining "somewhat agree" and "strongly agree" into another.

Research Question 2: Is there an association between characteristics of AAAs and their knowledge of research-related topics?

The survey defined knowledge as the body of information that an organization has that can be applied in helping AAAs conduct research activities. Research activities for knowledge included the following: identifying evidence-informed interventions or programs, selecting survey items to measure client outcomes, designing data storage and systems, identifying relevant data sets, applying study design methods, and translating evidence into practice. Respondents could indicate their level of knowledge for each research activity as "novice", "advanced beginner level", "competent", "proficient", "expert level" or "not applicable". To account for small cell sizes in the tables when including every category, we made knowledge into a binary variable. We dichotomized the knowledge variable by combining "novice", "advanced beginner level", and "competent" categories into one, while "proficient" and "expert level" were combined into the other. AAAs that selected

"not applicable" were excluded from analysis.

Research Question 3: Is there an association between characteristics of AAAs and their ability to engage in research?

The survey defined abilities as the AAAs' capacity to express a skill. Research activities for ability included the following: engaging target population in research activities, engaging study participants from underrepresented groups in research activities, collecting and analyzing quantitative data, collecting and analyzing qualitative data, and communicating research findings to key audiences. Respondents could rate their ability to engage in each research activity as "novice", "advanced beginner level", "competent", "proficient", "expert level" or "not applicable". To account for small cell sizes in the tables when including every category, we made ability into a binary variable. We dichotomized the ability variable by combining "novice", "advanced beginner level", and "competent" categories into one, while "proficient" and "expert level" were combined into the other. AAAs that selected "not applicable" were excluded from analysis.

Statistical Analysis

For the purpose of this analysis, data from the survey were de-identified and imported into SAS from Microsoft Excel. All statistical analysis was performed in SAS. The variables for attitude, knowledge, and ability were all dichotomized to account for the small sample size. AAA characteristic variables (i.e. budget size, HHS region, organization structure, predominantly rural) were left as is to include all categories with the exception of the dichotomized "predominantly rural" variable. Missing values and responses of "not applicable" for knowledge and ability domains were excluded from analysis.

For each of the research questions, we ran a bivariate analysis with tests of statistical significance. Fisher's Exact test was used to account for the small sample size and to obtain p-values (95% level of significance) and odds ratios for the binary AAA characteristic variables (budget size

and predominantly rural). Depending on the research question, we ran the bivariate analysis to test the association between each of the AAA characteristics with each of the variables for attitude, knowledge, and ability. The bivariate analysis for Research Question 1 included the characteristic variables and the variables to assess for AAAs' attitudes toward engaging in research. Analysis for Research Question 2 included the AAA characteristic variables and each of the variables for knowledge. Analysis for Research Question 3 used the AAA characteristics, but the association was tested through use of each of the ability variables. All results from the analyses were translated into tables for comparison by research question.

RESULTS

Sample Descriptive Data

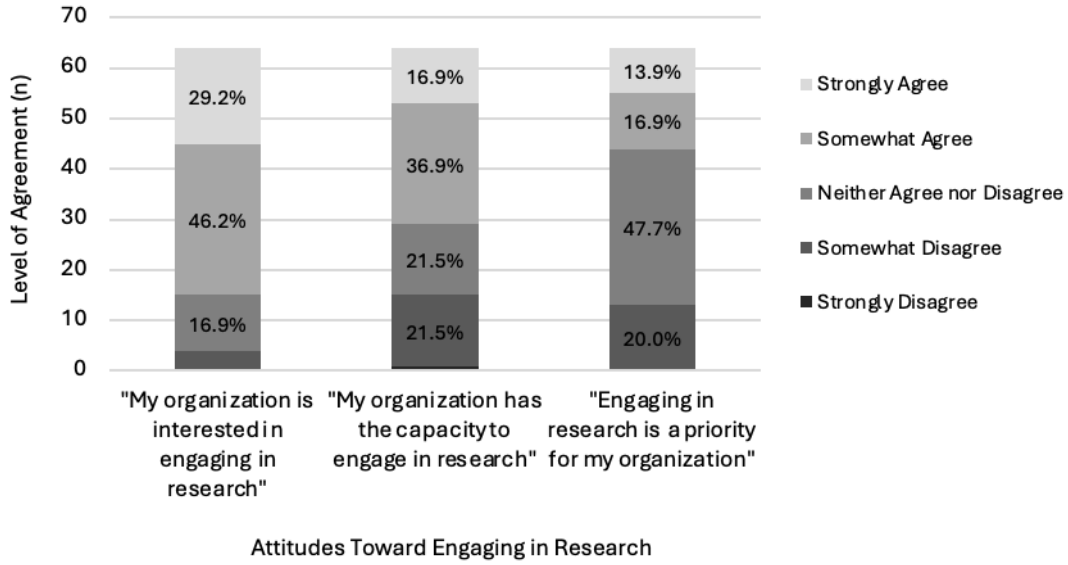
At the end of the survey period, a total of 65 AAAs participated in and completed the survey. Budget size was almost evenly split among the sample, with 44.6% of AAAs having a budget of less than $5 million and 55.4% with a budget of $5 million or greater. Each HHS region had AAAs represented in the sample, with the number of AAAs in each HHS Region as follows: Region 1 (n = 5; 7.7%), Region 2 (n = 4; 6.2%), Region 3 (n = 6; 9.2%), Region 4 (n = 12; 18.5%), Region 5 (n = 9; 13.9%), Region 6 (n = 6; 9.2%), Region 7 (n = 7; 10.8%), Region 8 (n = 8; 12.3%), Region 9 (n = 2; 3.1%), and Region 10 (n = 6; 9.2%). The organization structure of AAAs varied as well. Most AAAs were independent, non-profit agencies (n = 27; 41.5%), part of a council of governments or regional planning and development agency (n = 20; 30.8%) or were part of county government (n = 15, 23.1%), while only 3 AAAs were part of city government (n = 2; 3.1%) or some other organization structure (n = 1; 1.5%). Overall, nearly half of the sample served predominantly rural areas (n = 32; 49.2%) after dichotomizing area served. AAA characteristics are fully described in Table 1.

Table 1. Characteristics of Area Agency on Aging (AAA) providers from the CARE Network Baseline Survey

Sample Characteristics	**AAA Providers** (n = 65) n (%)
Budget Size	
< $5 million	29 (44.6)
$5 million or greater	36 (55.4)
HHS Region	
Region 1	5 (7.7)
Region 2	4 (6.2)
Region 3	6 (9.2)
Region 4	12 (18.5)
Region 5	9 (13.9)
Region 6	6 (9.2)
Region 7	7 (10.8)
Region 8	8 (12.3)
Region 9	2 (3.1)
Region 10	6 (9.2)
Organization Structure	
independent, non-profit agency	27 (41.5)
part of a council of governments or regional planning and development agency	20 (30.8)
part of county government	15 (23.1)
part of city government	2 (3.1)
other	1 (1.5)
Predominantly Rural	
Yes	32 (49.2)
No	33 (50.8)

In regard to AAAs' attitudes toward engaging in research (Figure 2), most 'somewhat agreed' (n = 30; 46.2%) that their organization was interested in engaging in research. Similarly, most 'somewhat agreed' (n = 24; 36.9%) that their organization had the capacity to engage in research. Most AAAs 'neither agreed nor disagreed' (n = 31; 47.7%) that engaging in research was a priority for their organization.

Figure 2. Area Agency on Aging (AAA) providers' (n = 64)[1] attitudes toward engaging in research[2]



[1]Total n = 64 due to missing data for 1 AAA
[2]Percentage (%) of sample shown when n ≥ 5

AAAs' knowledge of research-related topics varied across the sample. Notably, about half of AAAs were proficient (n = 33; 50.5%) in identifying evidence-informed interventions or programs. About a third of AAAs self-identified as 'proficient' (n = 24; 36.9%) in selecting survey items to measure client outcomes and 'competent' (n = 21; 32.3%) in identifying relevant data sets. 'Expert level' knowledge was highest in frequency for knowledge of designing data storage and systems (n = 8; 12.3%) and translating evidence into practice (n = 8; 12.3%). Comparatively, very few AAAs identified as 'novice' (n = 3; 4.6%) or 'advanced beginner level' (n = 3; 4.6%) for knowledge of identifying evidence-informed interventions or programs. AAA knowledge of designing data storage and systems, applying study design methods, and translating evidence into practice were mostly evenly distributed by levels of 'novice', 'advanced beginner level', 'competent', 'proficient', and 'expert level'. Full survey results of knowledge of research-related topics are in Table 2.

Table 2. Area Agency on Aging (AAA) providers' (n = 65) knowledge of research-related topics

	n (%)[1]					
Survey Topic	Novice	Advanced beginner level	Competent	Proficient	Expert level	Not applicable (N/A)
Knowledge of research-related topics						
Identifying evidence-informed interventions or programs	3 (4.6)	3 (4.6)	13 (20.0)	33 (50.8)	7 (10.8)	1 (1.5)
Selecting survey items to measure client outcomes	7 (10.8)	11 (16.9)	12 (18.5)	24 (36.9)	5 (7.7)	1 (1.5)
Designing data storage and systems	10 (15.4)	7 (10.8)	17 (26.2)	13 (20.0)	8 (12.3)	5 (7.7)
Identifying relevant data sets	8 (12.3)	8 (12.3)	21 (32.3)	14 (21.5)	6 (9.2)	3 (4.6)
Applying study design methods	12 (18.5)	15 (23.1)	13 (20.0)	12 (18.5)	6 (9.2)	2 (3.1)
Translating evidence into practice	10 (15.4)	13 (20.0)	14 (21.5)	12 (18.5)	8 (12.3)	3 (4.6)

[1]Numbers may not sum to total (n = 65) due to missing values

AAAs' ability to engage in research activities also varied across the sample, with most AAAs rating their abilities as 'competent' or 'proficient'. Over half of the AAAs were 'competent' or 'proficient' in engaging the target population in research activities (n = 17 (26.2%); n = 24 (36.9%)), engaging study participants from underrepresented groups in research activities (n = 19 (29.2%); n = 23 (35.4%)), collecting quantitative data (n = 19 (29.2%); n = 22 (33.9%)), collecting qualitative data (n = 20 (30.8%); n = 19 (29.2%)), analyzing quantitative data (n = 17 (26.2%); n = 18 (27.7%)), analyzing qualitative data (n = 20 (30.8%); n = 15 (23.1%)), and communicating research findings to key audiences (n = 20 (30.8%); n = 15 (23.1%)). Less AAAs rated their abilities for any research activities as 'advanced beginner level'. Similarly, a smaller percentage of AAAs rated their ability to engage in research activities as 'novice' or 'expert level', with 'expert level' ability being highest for

collecting quantitative data (n = 9; 13.9%) and engaging study participants from underrepresented groups in research activities (n = 8; 12.3%). A total of 8 (12.3%) AAAs indicated their ability to analyze quantitative data as 'novice', while only 2 (3.1%) rated their ability to engage study participants from underrepresented groups in research activities as 'novice'. (Table 3)

Table 3. Area Agency on Aging (AAA) providers' (n = 65) ability to engage in research activities

	n (%)[1]					
Survey Topic	Novice	Advanced beginner level	Competent	Proficient	Expert level	Not applicable (N/A)
Ability to engage in research activities						
Engaging target population in research activities	5 (7.7)	12 (18.5)	17 (26.2)	24 (36.9)	3 (4.6)	0 (0.0)
Engaging study participants from underrepresented groups in research activities	2 (3.1)	9 (13.9)	19 (29.2)	23 (35.4)	8 (12.3)	0 (0.0)
Collecting quantitative data	3 (4.6)	7 (10.8)	19 (29.2)	22 (33.9)	9 (13.9)	1 (1.5)
Collecting qualitative data	4 (6.2)	11 (16.9)	20 (30.8)	19 (29.2)	6 (9.2)	1 (1.5)
Analyzing quantitative data	8 (12.3)	11 (16.9)	17 (26.2)	18 (27.7)	5 (7.7)	2 (3.1)
Analyzing qualitative data	7 (10.8)	12 (18.5)	20 (30.8)	15 (23.1)	5 (7.7)	2 (3.1)
Communicating research findings to key audiences	5 (7.7)	13 (20.0)	20 (30.8)	15 (23.1)	7 (10.8)	1 (1.5)

[1]Numbers may not sum to total (n = 65) due to missing values

Research Question 1: Is there an association between characteristics of AAAs and their attitudes toward engaging in research?

Of the attitudes toward engaging in research, the only significant association identified was between budget size and interest in engaging in research (p = 0.008), with significantly lower odds of

interest in AAAs with a budget size of $5 million or greater (OR = 0.14 [0.03, 0.67]). No significant association was found between attitude toward interest in engaging in research and HHS region (p = 0.172), organization structure (p = 0.125), or service of a predominantly rural area (p = 0.382). No significant association was found between attitude toward capacity to engage in research and budget size (p = 0.079), HHS region (p = 0.346), organization structure (p = 0.195), or service of a predominantly rural area (p = 0.209). Similarly, no significant association was found between attitude toward engaging in research as a priority and budget size (p = 0.590), HHS region (p = 0.795), organization structure (p = 0.383), and service of a predominantly rural area (p = 0.791). (Table 4)

Table 4. Associations between Area Agencies on Aging (AAA) providers' characteristics and attitudes toward engaging in research[4]

		Characteristics			
Attitude Variable		Budget Size	HHS Region	Organization Structure	Predominantly Rural
Interest in engaging in research	p-value[1]	0.008*	0.172	0.125	0.382
	OR[2]	0.14	-	-	0.54
	(95% CI)[3]	(0.03, 0.67)	-	-	(0.17, 1.76)
Capacity to engage in research	p-value[1]	0.079	0.346	0.195	0.209
	OR[2]	0.38	-	-	0.47
	(95% CI)[3]	(0.14, 1.06)	-	-	(0.17, 1.28)
Engaging in research is a priority	p-value[1]	0.590	0.795	0.383	0.791
	OR[2]	0.69	-	-	0.82
	(95% CI)[3]	(0.24, 2.00)	-	-	(0.28, 2.36)

[1]p-values derived from Fisher's Exact Test at the 0.05 level of significance
[2]Unadjusted odds ratio (OR) only reported for binary variables
[3]95% CI only reported with a corresponding OR
[4]Significant results indicated by *

Research Question 2: Is there an association between characteristics of AAAs and their knowledge of research-related topics?

A statistically significant association was observed between the predominantly rural variable and the knowledge topics of survey items (p = 0.038), data sets (p = 0.012), and study design (p = 0.049), suggesting that service of a rural area is associated with knowledge of research-related topics.

The odds of having knowledge of survey items (OR = 0.30 [0.10, 0.89]), data sets (OR = 0.20 [0.06, 0.68]), and study design (OR = 0.28 [0.09, 0.95]) were lower in AAAs which serve predominantly rural areas. The association between serving a predominantly rural area and knowledge of interventions was not statistically significant (p = 0.054); however, the 95% confidence interval for the OR did not include 1, suggesting there could be a significant relationship (OR = 0.31 [0.10, 0.98]). This occurs again in the association between budget size and knowledge of data sets (OR = 0.32 [0.10, 0.99]; p = 0.054). No statistically significant associations were identified between budget size, HHS region, or organization structure and any of the knowledge topics. (Table 5)

Table 5. Associations between Area Agency on Aging (AAA) providers' characteristics and knowledge of research-related topics[4]

		Characteristics			
Knowledge Topics		Budget Size	HHS Region	Organization Structure	Predominantly Rural
Interventions	p-value[1]	0.577	0.139	0.459	0.054
	OR[2]	0.64	-	-	0.31
	(95% CI)[3]	(0.21, 1.98)	-	-	(0.10, 0.98)
Survey Items	p-value[1]	0.119	0.589	0.075	0.038*
	OR[2]	0.41	-	-	0.30
	(95% CI)[3]	(0.14, 1.17)	-	-	(0.10, 0.89)
Data Systems	p-value[1]	0.266	0.955	0.872	0.164
	OR[2]	0.50	-	-	0.39
	(95% CI)[3]	(0.16, 1.50)	-	-	(0.13, 1.22)
Data sets	p-value[1]	0.054	0.814	0.896	0.012*
	OR[2]	0.32	-	-	0.20
	(95% CI)[3]	(0.10, 0.99)	-	-	(0.06, 0.68)
Study Design	p-value[1]	0.088	0.904	0.458	0.049*
	OR[2]	0.34	-	-	0.28
	(95% CI)[3]	(0.11, 1.08)	-	-	(0.09, 0.95)
Translate	p-value[1]	0.170	0.860	1.000	0.094
	OR[2]	0.44	-	-	0.33
	(95% CI)[3]	(0.15, 1.34)	-	-	(0.10, 1.04)

[1]p-values derived from Fisher's Exact Test at the 0.05 level of significance
[2]Unadjusted odds ratio (OR) only reported for binary variables
[3]95% CI only reported with a corresponding OR
[4]Significant results indicated by *

Table 6. Associations between Area Agency on Aging (AAA) providers' characteristics and ability to engage in research activities[4]

		Characteristics			
Ability Topics		Budget Size	HHS Region	Organization Structure	Predominantly Rural
Engage Target Population	p-value[1]	0.129	0.944	0.097	0.040*
	OR[2]	0.44	-	-	0.31
	(95% CI)[3]	(0.16, 1.23)	-	-	(0.11, 0.89)
Engage Underrepresented Groups	p-value[1]	0.306	0.276	0.730	0.127
	OR[2]	0.54	-	-	0.42
	(95% CI)[3]	(0.20, 1.51)	-	-	(0.15, 1.18)
Collect Quantitative Data	p-value[1]	0.129	0.530	0.129	0.196
	OR[2]	0.43	-	-	0.45
	(95% CI)[3]	(0.15, 1.23)	-	-	(0.16, 1.25)
Collect Qualitative Data	p-value[1]	0.067	0.245	0.064	0.040*
	OR[2]	0.35	-	-	0.31
	(95% CI)[3]	(0.12, 1.01)	-	-	(0.11, 0.92)
Analyze Quantitative Data	p-value[1]	0.593	0.859	0.584	0.181
	OR[2]	0.65	-	-	0.43
	(95% CI)[3]	(0.23, 1.88)	-	-	(0.14, 1.26)
Analyze Qualitative Data	p-value[1]	0.784	0.363	0.543	0.271
	OR[2]	0.77	-	-	0.46
	(95% CI)[3]	(0.26, 2.28)	-	-	(0.15, 1.41)
Communicate Findings	p-value[1]	0.113	0.436	0.238	0.017*
	OR[2]	0.40	-	-	0.24
	(95% CI)[3]	(0.14, 1.18)	-	-	(0.08, 0.77)

[1]p-values derived from Fisher's Exact Test at the 0.05 level of significance

[2]Unadjusted odds ratio (OR) only reported for binary variables

[3]95% CI only reported with a corresponding OR

[4]Significant results indicated by *

Research Question 3: Is there an association between characteristics of AAAs and their ability to engage in research?

Among all AAA characteristics, serving a predominantly rural area was most consistently associated with topics of ability to engage in research ($p < 0.05$). AAAs which served predominantly rural areas had significantly lower odds of engaging the target population (OR = 0.31 [0.11, 0.89]; p = 0.040), collecting qualitative data (OR = 0.31 [0.11, 0.92]; p = 0.040), and communicating findings (OR = 0.24 [0.08, 0.77]; p = 0.017) compared to those not serving predominantly rural areas. Ability to engage underrepresented groups, collect quantitative data, analyze quantitative data, and analyze qualitative data were not associated with service to predominantly rural areas. No significant associations were observed between AAAs' budget size, HHS region, or organization structure and any topics of ability to engage in research. (Table 6)

DISCUSSION

In this thesis, we examined how the characteristics of 65 AAAs were related to their attitudes toward engaging in research, knowledge of research-related topics, and ability to engage in research activities. Of the AAA provider characteristics (i.e., budget size, HHS region, organization structure, and predominantly rural area served), service to a predominantly rural area was most consistently significantly associated with AAAs' knowledge and ability related to caregiver research ($p < 0.05$). Thus, understanding barriers to engaging in research specifically for rural AAAs is essential in order to address the barriers those AAAs face in participating in caregiver research. The only other AAA characteristic for which a significant association was found was between budget size and attitude toward interest in engaging in research.

Budget size was only significantly associated with attitude toward interest in engaging in research, with nearly 85% lower odds of agreeing that they were interested in engaging in research among AAAs with a budget size of $5 million or greater compared to AAAs with lower budget size.

These lower odds were not found between budget size and capacity to engage in research or engaging in research as a priority, suggesting that budget size is not indicative of AAAs' capacity or priority in engaging in research. We thus hypothesize that AAAs with smaller or larger budget sizes have similar attitudes toward whether their organization has the capacity to engage in research or if engaging research is a priority for their organization. Comparatively, all but 2 of the 28 AAAs with budget sizes less than $5 million (with the exception of 1 AAA with missing data on attitudes toward engaging in research) indicated their organization was interested in engaging in research. Therefore, while AAAs with larger budget sizes have significantly lower odds of interest in engaging in research, we may attribute this to the overwhelming majority of AAAs with smaller budgets having an interest in engaging in research. Alternatively, higher budget size may mean that the AAA has a very large population of older adults to serve with interventions and direct supports and may not be as open to the idea of research. Broadly, more AAAs overall indicated their organization was interested in engaging in research (n = 49; 76.6%), highlighting that AAAs are likely to be willing to engage in research if they have access to adequate resources to be able to do so.

Our finding that service to a predominantly rural area is significantly associated with knowledge topics of survey items, data sets, and study design suggests that compared to non-rural AAAs, rural AAAs generally have 70% lower odds of knowing how to select survey items to measure client outcomes, 80% lower odds of identifying relevant data sets, and nearly 70% lower odds of applying study design methods. We hypothesize that a larger sample size of AAAs may identify significantly lower odds of knowledge among rural AAAs for identifying evidence-informed interventions or programs as the p-value nears the line of being statistically significant (p = 0.054), in addition to results revealing that the majority of non-rural AAAs agreed that they have knowledge of this topic (n = 24; 80.0%) compared to less rural AAAs indicating they agreed (n = 16; 55.2%). For knowledge of designing data storage and systems and translating evidence into practice, we found no

significant associations according to rurality. This may be attributed to the more even distribution of rural and non-rural AAAs indicating they had knowledge of these topics, emphasizing that these are two areas in which all AAAs could benefit from having increased knowledge in. On the other hand, rural AAAs in particular may be limited in their knowledge of survey items, data sets, and study design. Because research reiterates that rural AAAs have limited staffing pools (Brady et al., 2022; National Association of Area Agencies on Aging, 2021; Nelson, 1980), this finding could be due to rural AAAs not having staff available who are trained specifically in these research-related topics.

The idea that service to a predominantly rural area may be influential in AAAs' engagement in research is further reinforced by the finding that rural AAAs have significantly lower odds of ability to engage in certain research activities. Compared to non-rural AAAs, AAAs serving rural areas had significantly lower odds of ability to engage the target population, collect qualitative data, and communicate findings. We hypothesize that rural AAAs may have less ability to engage in these research activities due to physical restraints attributed to rural location. Engaging the target population and collecting qualitative data from them through the form of methods like interviews may be more difficult for rural AAAs as rural populations are smaller and more sparsely located. Additionally, if rural AAAs have lower budgets and limited resources (National Association of Area Agencies on Aging, 2021; Nelson, 1980), their access to technology could hinder their ability to communicate findings to broad audiences. On the other hand, rural AAAs may not have lower odds of engaging underrepresented groups as rural residents are typically underrepresented in research (McElfish et al., 2018). Rural AAAs may have the ability to collect quantitative data, analyze quantitative data, and analyze qualitative data similar to the ability of non-rural AAAs if they are able to access and perform analysis on already existing data sets which can be obtained remotely. Despite these differences in ability to engage in different research activities, rural area was the only AAA characteristic significantly associated with ability to engage in research activities. It thus appears that

AAAs in rural areas generally have less ability to engage in research activities compared to predominantly non-rural AAAs. Together with the similar findings from knowledge of research-related topics, these findings highlight rurality as a barrier to engaging in research.

A Data Brief of the 2020 National Survey of Area Agencies on Aging which focuses on rural location provides insight into our findings that rural AAAs have less knowledge and ability of research. The report emphasizes that rural areas can challenge service provision for AAAs and other agencies serving older adults (National Association of Area Agencies on Aging, 2021) because clients are spread out across a wide area, have lower median budgets, have less full-time staff and volunteers, and have limited pools of strong staff applicants (National Association of Area Agencies on Aging, 2021). While this understanding of rural location is in the context of AAAs providing family caregiving services, other factors mentioned in the data brief, such as budget size, may influence AAAs' knowledge and ability related to research activities. Our analysis only identified budget size as being significantly associated with AAAs' interest in engaging in research and not with knowledge and ability to engage in research. However, rural AAAs typically have smaller budgets which could exacerbate their limited access to staff and other resources, more negatively impacting their knowledge and ability of research in comparison to non-rural AAAs. One AAA provider expanded on this point through an open-ended response in the baseline survey, describing how "[their] agency just does not have the capacity or resources to engage in activities outside of the core services [they] provide and receive funding for".

Despite our findings that rural AAAs have less knowledge of research-related topics and less ability to engage in research-related activities, we found no significant association between attitudes toward engaging in research and serving a predominantly rural area. Furthermore, no significant association was found between attitudes toward engaging in research (i.e., interest, capacity, priority) and budget size, HHS region, or organization structure, except for the significantly lower odds of

AAAs with budget sizes of $5 million to have interest in engaging in research. As previously discussed, this may be attributed to almost all of the AAAs with smaller budgets of less than $5 million indicating their organization was interested in engaging in research. Otherwise, while the analysis for budget size did not yield any other significant results, it is important to acknowledge that approximately 44.5% of the AAAs who completed the survey did not have the capacity to engage in research. Of the 64 AAAs who responded to this question, 29 of them strongly disagreed, somewhat disagreed, or were neutral in their endorsement of the statement "My organization has the capacity to engage in research". This underlines difficulties AAAs of all characteristics have regarding capacity to engage in research. Furthermore, about 67.7% of AAAs did not agree that engaging in research was a priority for their organization, with 13 somewhat agreeing and 31 indicating their neutral attitude toward engagement in research as a priority. As AAAs are tasked with addressing the needs and concerns of all older persons at regional and local levels, as well as for coordinating and offering services for older adults (ACL, 2024), their numerous responsibilities may limit their capacity to engage in caregiver research and place engagement in research as a lower priority compared to their vital role in delivering services to older adults and their caregivers.

While budget size, HHS region, and organization structure did not have statistically significant associations with AAAs' attitudes, knowledge, and ability related to family caregiver research in this study, except for the significant association between budget size and interest in engaging in research, these characteristics may still influence participation in caregiver research by organizations that serve older adults or caregivers. Furthermore, while a significant portion of AAAs who completed the survey have competent, proficient, or expert level knowledge and ability related to research activities, improvements can still be made to strengthen AAA participation in caregiver research. Increasing AAAs' attitudes toward interest, capacity, and priorities for engagement in research and improving their knowledge of research-related topics and ability to engage in research

activities may expand their engagement in research.

Limitations

This study had several limitations. Primarily, the sample size was small, as only 65 AAAs completed the survey and were included in analysis. The bivariate analyses including HHS region and organization structure were most impacted due to the multiple categories resulting in small cell sizes. Thus, our odds ratios may be overestimated due to the small sample size. However, it is of note that despite the small sample size, the confidence intervals remained fairly narrow. Another limitation regarding the sample could be that AAAs with less capacity to engage in research may have been less likely to respond to the survey as they were too busy carrying out other services, limiting the generalizability of our results. The next limitation of the study is in regard to responses concerning AAAs' attitudes toward engaging in research. While AAA representatives were asked to answer according to their organization's opinion, not their own, there is a risk for personal bias if representatives responded based on their own opinions. One last limitation which must be acknowledged is that even if our bivariate analyses did not yield statistically significant results for budget size, HHS region, and organization structure, these AAA characteristics may still influence AAAs' attitudes toward capacity to engaging in research, knowledge of research-related topics, and ability to engage in research. Even if not significant from a statistical standpoint, these characteristics can impact AAAs' involvement in caregiver research.

Future Research

To our knowledge, this is the first study exploring Area Agency on Aging (AAA) providers' characteristics in association with attitudes, knowledge, and ability related to participation in family caregiver research. Currently, there are limited existing research studies which investigate caregiver research factors such as knowledge and ability in organizations that provide direct services to older

adults, like AAAs. Some data briefs and reports, mostly through USAging, highlight challenges or barriers AAAs face when it comes to serving older adults and caregivers, but do not focus on research capacity to engage in research. Additionally, of the limited studies on caregiver participation in research, most only consider the caregiver perspective of barriers to engaging in research and are detached from the service providing organization. By contrast, this study emphasizes the service providing organizations' characteristics and perspectives which influence their engagement in research. Additional research needs to be conducted that evaluates AAAs' attitudes, knowledge, and ability related to caregiver research so that barriers to engagement in research can be addressed by the NFCSP or other entities involved in AAA service provision. Moreover, in line with findings from this study that rural AAAs have less knowledge and ability to engage in research, future studies with larger sample sizes and additional rural AAAs could expand our understanding of rural barriers to participating in caregiver research. Learning what specific barriers exist for rural AAAs and other rural organizations which serve older adults can inform interventions to ultimately increase participation in family caregiver research.

Public Health Implications

In sum, improving the attitudes, knowledge, and ability of AAAs and organizations which serve older adults and/or caregivers in relation to caregiver research can help us better support AAAs and ultimately, the family caregivers that they serve. Understanding barriers AAAs face to participate in research in the context of specific characteristics provides opportunities for the NFCSP to address them through processes which increase funding or staff capacity for AAAs in rural areas. Furthermore, increased involvement in research by AAAs and other entities in the NFCSP can improve their understanding of caregivers' needs. Knowing how best to support caregivers can improve the overall well-being of both caregivers and the older adults they care for by providing evidence-based interventions. Our findings emphasize the potential role of rural location

as a correlate of having less proficiency in knowledge of research-related topics and less ability to engage in research activities. While limited research exists on the attitudes, knowledge, and ability of AAAs and similar organizations, this analysis provides data on caregiver research activities and involvement in support of Goal 5 of the National Strategy to Support Family Caregivers which aims to provide research trainings, data resources, and partnership activities between researchers and AAAs. In the final survey wave that will be fielded two years after the CARE Network Baseline Survey, we hope to see progress and improvements in AAAs' attitudes toward engaging in research, knowledge of research-related topics, and ability to engage in research activities.

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APPENDIX: CARE NETWORK BASELINE SURVEY

Survey Questions

CARE Network Baseline Survey

for NFCSP Area Agencies on Aging (AAA) Providers

Digital Consent

The Creating and Advancing Caregiving Research and Evidence (CARE) Network is implementing a project to build the capacity of the National Family Caregiver Support Program (NFCSP) to participate in or conduct family caregiving research. **The CARE Network is seeking feedback from NFCSP providers like you on your organization's interest, knowledge, and ability to engage in family caregiving research**. This project is funded by the Administration for Community Living. This survey is being conducted by Emory University and USAging in partnership with the National Alliance for Caregiving (NAC).

This survey is designed to gather insight on your organization's perspective related to family caregiving research. The survey should take **about 10 minutes** to complete. **Your responses are confidential** and are used only for the purpose of informing a research agenda and resources to advance capacity to engage in family caregiving research.

This survey asks about your organization's attitudes toward research, research activities or partnerships in the last five years, and knowledge, and ability on research topics or skills. If you need to pause the survey or return to a previous page, you may do so during the two-week time period (10/2/24 - 10/15/24) that the survey is open.

Your participation is completely voluntary, and you can discontinue your participation at any moment for any reason. Refusal to participate will not affect your employment in any way. Those who complete the survey will receive a **$40 Amazon gift card** if you enter your email address at the end of the survey. (Please note, that your email address will not be linked to your survey responses.)
We do not foresee there being any risks associated with participating in the survey. We will not share your individual survey response with anyone outside of our research team without your explicit consent, and all survey responses will be stored in a secure location at Emory University and USAging.

For any questions about the study, please contact Dr. Regina Shih, the survey's director, at [redacted].

If you have any questions about your rights as a research participant or need to report a research-related injury or concern, you can contact Emory University's Human Subjects Protection Committee by emailing Patricia Leslie at [redacted]. When you contact the Committee, please refer to Study #00008450.

If you agree to complete this survey, please click the arrow to start.

For the purposes of this survey:

Family caregivers are defined by the Older Americans Act, Title III-E as:

- Those age 18 and older providing support to adults aged 60 and older,
- Those age 18 and older caring for adults of any age living with Alzheimer's disease or a related disorder,
- Older relative caregivers (age 55 and older), caring for children other than their own,
  AND
- Older relative caregivers (age 55 and older) of disabled adults ages 18-59 years which may include children of the older relative caregiver.

Please answer the questions from the perspective of your organization/team rather than your individual perspective.

Many NFCSP/NACSP providers participate in or conduct research in some way but might not call it research. Gathering community data and using it to support planning, evaluating your services and programs, measuring change in outcome measures, promoting research opportunities to clients, or conducting a study in your own community are all examples of research activities. Despite a growing body of research on family caregiving, there is a lack of comprehensive, population-based data about the prevalence of caregiving and experiences of family caregivers across the lifespan.

In support of Goal 5 of the National Strategy to Support Family Caregivers, the CARE Network is seeking feedback from NFCSP providers like you on family caregiving research priorities and to assess the capacity of Area Agencies on Aging to engage in family caregiving research. Building caregiving research networks can ensure that the nation has the knowledge and data necessary to adequately recognize, assist, and support family caregivers.

0. Please record your name, title/role in your organization, and your organization name below.

Your name: _____
Title/role: _____
Organization name: _____

We would like to learn about **your organization's attitudes** toward engaging in **research (not specific to any one topic or field).** Please think about research in terms of all the activities that occur during the research process (e.g. planning the research design, collecting data, analyzing data, etc.).

1. How would you describe **your organization's attitudes** toward engaging in research? Please rate your level of agreement with each of the following statements on a scale of 1 to 5, where 1 means "Strongly Disagree" and 5 means "Strongly Agree."

   Engaging in research *can include conducting research within your organization, participating in research that another organization is conducting, or partnering in research with another organization, like a university research center.*

	1 (Strongly disagree)	2 (Somewhat disagree	3 (Neither agree nor disagree)	4 (Somewhat agree)	5 (Strongly agree)
1a. My organization is *interested* in engaging in research					

1b. My organization has the *capacity* to engage in research					
1c. Engaging in research is a *priority* for my organization					

If you would like to share additional details relating to your responses to the above statements, please elaborate here: _____

We would like to learn more about **your organization's experiences with or plans to engage in research activities**. Examples of **research activities** include but are not limited to: collecting data, analyzing changes in outcome metrics, or evaluating program outcomes. Please note: *using a research-informed program does not constitute research activity.*

2. In the past five (5) years has *your organization* conducted or participated in any research activities?
    a. Yes
    b. No
    c. Other: _____

2a. *[If a or c selected for 2]* Did you partner with any external organization(s) (e.g. university researcher or center, consulting group, etc.) on research activities?

a. Yes
b. No

2b. [*If a (yes) is selected for 2a*] With whom did you partner?

_____

2c. *[If a (yes) is selected for 2a]* Which entity initiated the research activities?

_____

2d. *[If a or c selected for 2]* Please briefly describe the types of research activities. Please note if any of these activities are considered **family caregiving research** based on the following definition:

_____

Family caregiving research is defined as: *the investigation and study of data to understand who caregivers are, the prevalence of family caregivers, the types of care they provide, the impacts of being a family caregiver, and the*

design/implementation/testing/evaluation of programs, interventions, and services provided to family caregivers. The investigation and study of data includes collection of data, documentation of information, data analysis, analysis interpretation, and translation of research into practice.

3. *[If a or c selected in Question 2]* How has your organization included family caregivers in the research process? Select all that apply.
    a. Family caregivers are participants in the research study
    b. Family caregivers serve as advisors to inform the research process (e.g. community advisory board)
    c. Family caregivers provide input on the study design
    d. Family caregivers provide input on the data collection process
    e. Family caregivers provide input on the interpretation of findings
    f. We disseminate study results back to family caregivers in the form of publications, briefings, newsletters, etc.
    g. We have *not* included family caregivers in the research process
    h. Other _____

3a. *[If a or c selected in Question 2]* If you would like to share additional details relating to your responses on how your organization has included family caregivers in the research process, please elaborate here:

_____

4. What is the biggest challenge or barrier to engaging in research activities for your organization?

_____

5. Where does your organization go to find family caregiving interventions/programs/services to deliver? For example, working with your State Unit on Aging to determine what works best for your region, or referencing a go-to list of interventions from a specific source (e.g. National Council on Aging (NCOA), Benjamin Rose Institute Best Programs for Caregiving, etc.).

_____

6. How would you describe **your organization's knowledge** of the following research-related topics? Please select on a scale of 1 to 5, where 1 means "Novice or new to the field" and 5 means "Expert level knowledge"

Knowledge can be defined as the body of information that your organization has that can be applied in helping you conduct these research activities. If these research-related topics are not relevant to your organization's work, please select N/A in the matrix and describe why it is not applicable in the text box below.

	1 Novice *We are not aware of this topic*	2 Advanced beginner level *We are aware of this topic, but we have limited knowledge about it*	3 Competent *We understand this topic, but we are unsure how to apply it in our work*	4 Proficient *We understand this topic and have applied it in our work*	5 Expert level *We are very familiar with this topic and have applied this topic extensively in our work*	6 Not applicable (N/A)
6a. Identifying evidence-informed interventions or programs						
6b. Selecting survey items to measure client outcomes						
6c. Designing data storage and systems (e.g. data entry, data privacy, data sharing agreements)						
6d. Identifying relevant data sets (e.g. to establish populations with need)						
6e. Applying study design methods (e.g. sampling groups to survey, assigning groups to assess program effectiveness)						
6f. Translating evidence into practice (e.g. using evidence-informed practices in your programs, translating findings into easily understandable						

language for the target population)						

If you selected N/A to one of these items, please briefly describe why you selected that option: _____

7. How would you describe **your organization's ability** to engage in each of the following research activities? Please rate your organizational ability on a scale of 1 to 5, where 1 means "Novice" (no previous experience) and 5 means "Expert" (expert level experience).

   Abilities can be defined as your organization's capacity to express a skill. If these research activities are not relevant to your organization's work, please select N/A in the matrix and describe why it is not applicable in the text box below.

	1 Novice *We are not aware of this topic*	2 Advanced beginner *We are aware of this topic, but we have limited knowledge about it*	3 Competent *We understand this topic, but we are unsure how to apply it in our work*	4 Proficient *We understand this topic and have applied it in our work*	5 Expert *We are very familiar with this topic and have applied this topic extensively in our work*	6 Not applicable (N/A)
7a. Engaging target population in research activities (e.g. advisory board, community engagement)						
7b. Engaging study participants from underrepresented groups in research activities (e.g. advisory board, community engagement)						
7c. Collecting quantitative data (e.g., numerical data collected through surveys or routine caregiver assessments)						

7d. Collecting qualitative data (e.g., data representing information and concepts not represented by numbers and collected through key informant interviews, focus groups)						
7e. Analyzing quantitative data						
7f. Analyzing qualitative data						
7g. Communicating research findings to key audiences						

If you selected N/A to one of these items, please briefly describe why you selected that option: _____

8. What technical assistance topics would be most useful for your organization to build its capacity to engage in research activities or partner with researchers? Please select up to three topics that would be most useful.
    a. The research process in general, such as Research 101
    b. Partnerships for research (how to find partners or collaboration opportunities, roles of each organization, tips for success)
    c. Engaging participants from underrepresented groups
    d. Data collection
    e. Data analysis
    f. Translating family caregiving research findings into practice
    g. Data resources for family caregiving research
    h. Assessing program efficacy using evaluation frameworks
    i. Caregiver assessments
    j. OTHER: _____

9. (OPTIONAL) Does your organization have an innovative program or service for family caregivers? If so, please briefly describe or provide a weblink to the program below and include the name and email address of someone that USAging may follow up with for additional information about the program. An innovative program may be something different from what other AAAs offer or a program that other AAAs may not be aware of.

    a. No

    b. Yes

Program name (if applicable): _____

Brief program description or weblink: _____

Name: _____

Email address: _____

Thank you so much for your survey responses! As a sign of our appreciation, we will be giving one $40 gift card incentive per AAA that participated. *Which AAA staff member would you like this gift card incentive to be sent to?*

Name_____

Email address: _____

When you hit "Next page" the survey will end.