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Senior Citizens and Digital Information Access: The Obstruction of Comforting Silence

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ABSTRACT

This study investigates the possibility of undetected access obstructions preventing senior citizens from using digital information maintained by Alabama public libraries. Research methods include a literature review, a survey of Alabama public library administrators, and a textual analysis of online public library programming guides from four urban areas within the state. The survey gauges the perceptions, experiences, and actions of library administrators pertaining to digital library accessibility for senior citizens. The textual analysis component measures significant outreach efforts by public libraries targeting senior citizen patrons. Data collected suggest that Alabama public libraries lack unity and direction in their approach to digital technology training for elderly citizens, and this lack of effective outreach is contributing to a dysfunctional communicative relationship. This dysfunction is identified as a comforting silence, a communicative void in which inaction and indifference work covertly (and often unintentionally) to restrict digital accessibility for Alabama's senior citizens.

KEYWORDS

comfortable silence, digital access, digital divide, public libraries, senior citizen

INTRODUCTION

This research investigates the possibility of undetected access obstructions in public libraries that may prevent senior citizens from accessing, discovering, and using digital information provided by Alabama public libraries. The study is limited to a three-year period immediately preceding October 2021, and it employs the following investigative methods: (1) a literature review of peer-reviewed publications, (2) a survey of Alabama public library administrators, and (3) a textual analysis of online programming guides from four public libraries in high-population urban areas of Alabama.

Purpose of the Study

Alabama public libraries must plan and prepare for a projected increase in service demand from senior citizen patrons in the near future. The population of individuals over the age of 65 is expected to reach 81 million in the United States by the year 2050, and this group is projected to increase in size faster than other demographic age groups (Okobi, 2014). In addition, the Alabama Department of Public Health predicts that Alabama's senior citizen population will increase by 82.4% in the 30 years following 2010 (Alabama Department of Public Health, 2021). Because digital technology is crucial to providing modern library services, preparation for an increased senior citizen population should include a critical evaluation of efforts to educate and train Alabama's elderly in the discovery, access, and use of digital resources.

This study addresses these concerns by investigating digital library training and outreach services provided by Alabama public libraries to senior citizens. Such research is needed to gauge the effectiveness of educational efforts targeting elderly library readers and to identify and define service deficiencies which may result in information access obstructions to this age-defined group.

Research Questions

This study addresses three core research questions:

RQ1. Do Alabama public library administrators understand the need for digital library education and training for senior citizen patrons?

RQ2. Are Alabama public library administrators pursuing and implementing outreach and programming initiatives targeting senior citizens for digital library education and training?

RQ3. Are programming changes necessary to support an increase in senior citizen use of digital materials at Alabama public libraries?

Definitions

Throughout this paper, the term senior citizen, or senior, refers to an individual over the age of 55 who is currently residing in the United States.

Scope of the Study

With the exception of the literature review, all data collected in this study were discovered, accessed, and retrieved within the state of Alabama, and all such data are geographically specific to public libraries within the state of Alabama.

<p style="text-align:center">**LITERATURE REVIEW**</p>

The following literature review provides a well-grounded footing for the contextual analysis of data presented in this study of Alabama library practice.

Responsibility of the Public Library to Provide Outreach Services

It is the duty of the public library to address demographic change, and the public library must find ways to bring services to readers who are unable to visit the library (Okobi, 2014). This point is substantially relevant when considering the public library's relationship with senior citizens, as it sets an ethical standard for proactive outreach services and the necessary adjustment of these services in response to demographic change. Earlier studies, such as those conducted by Molyneux (2005) and Bashaw (2010), also support library outreach efforts as a responsible and necessary community service. This responsibility to provide library outreach is easily extended to the realm of digital library services, as digital communications and the internet are increasingly replacing traditional paper-based publishing efforts (Ross & Sennyey, 2008).

Information Access Obstructions and the Technology "Outsider"

The public library is an agency of institutional power capable of obstructing patron engagement through its own services and procedures (Cavanagh & Robbins, 2021). One example of such blockage is an "acceptable use policy," which intentionally restricts internet access at public libraries (Pautz, 2013). Words cataloged via outdated terminology also provide an example of unintentional access obstruction by libraries, with antiquated usage of words like "gay" causing inaccurate search returns to modern-day library users (Nowak & Mitchell, 2016). Obstructions such as these are often benign in effect, but librarians should be aware of the potential for detrimental access obstructions unintentionally caused by their own actions.

One relevant study suggested that senior citizen readers perceive of themselves as "outsiders" in the digital world of touch screens and cell phones, and this outsider mentality can prevent elder patrons from expressing a nascent interest in digital reading materials (Blažič & Blažič, 2020). More recent research supports this perspective through its examination of internet activities substituting for in-person services to the elderly during the COVID-19 pandemic (Cohen-Mansfield et. al., 2021). This study discovered that the most common reason older persons did not participate in internet activities was a lack of awareness regarding the program (Cohen-Mansfield et. al., 2021).

In this context, many of Alabama's elderly readers could be reluctant to ask about services, such as OverDrive or Hoopla, or they may simply lack knowledge of their library's digital programming and resources. In either case, elderly readers would encounter an obstruction to information access through

a lack of awareness. The possibility for such obstruction suggests the need for energetic outreach efforts from Alabama librarians to introduce senior citizens to virtual libraries.

Functions of Age Categorizations in Obstructing Senior Citizen Information Access

Sikes (2020) studied the outreach efforts of rural libraries targeting senior citizen patrons in Washington County, Virginia. In a revealing insight, the author noted that public libraries provided more outreach services for children, teenagers, and other adults than they did for senior citizens (Sikes, 2020). A similar disparity was reported at the 2013 annual conference of the American Library Association, where presentations pertaining to children and youth far outnumbered those addressing elderly services (Perry, 2014).

Few Alabama librarians would argue to reduce outreach efforts to younger adults, but the points raised by Sikes's (2020) and Perry (2014) are noteworthy because they challenge prejudicial perspectives based upon age. Childhood and youth education are important, but Alabama librarians should consider approaching age-delineating service components with equity and consideration for the elderly.

Cavanagh and Robbins (2012) studied the Canadian Public Library as a place supporting baby boomers caring for their own elders. In this process, the authors discovered that senior citizens are really two different demographic groups, the very old and their younger baby boomer cohorts.

Perry (2014) also reported an interesting discovery related to the categorization of senior citizens by age. Perry suggested inconsistent age categorizations adversely affected the evaluation of research related to senior citizen issues. This acknowledgement of evaluative issues related to divergent age categorizations illustrates the difficult path librarians encounter when attempting to educate and train elderly populations with a single cohesive approach.

Cavanagh and Robbins (2012) recommended libraries approach elderly age diversity the same way they address it with young people, by using age-based categories like preschoolers, children, and teens. In this respect, the authors recognized the fast-growing relevance of senior citizen populations and the need for a new approach in providing library services to them.

Senior Citizen's Ability to Navigate the Internet

Wang (2013) researched public library blogs and adult self-learning in Taiwan. Wang proposed the idea of a paradigm shift occurring in the learning process of senior citizens due to the information revolution of digital technologies. As a result of this shift, Wang concluded that older adults are comfortable using internet technology, and suggested that conceptions of the elderly being deficient in internet usage were grossly inaccurate.

Sikes (2020) discovered that group members in an elderly focus group could increase their information access capabilities with an increased knowledge of technology applications. This point suggests that the training and education of the elderly in technology applications is directly relevant to their success in accessing digital information and the internet.

In a much earlier study, Gómez and Grau (2004) assessed the value of web design features in providing library navigation services to the elderly. They proposed three categories, referred to as service segments, and ranked them by value. These service segments—from lowest value to highest—are described as: (1) simple hyperlinks to relevant information, (2) hyperlinks supplemented with descriptive comments, and (3) website pages designed exclusively for senior citizens (Gómez & Grau, 2004).

These hierarchical service classifications retain relevance and value today, because they provide a framework for best serving senior citizens with relevant and easy navigational discovery of information on the internet (Gómez & Grau, 2004). Easy access to information can encourage more frequent internet usage by the elderly, and consequentially, this increased usage can stimulate digital learning activities (Lee et al., 2014).

Teaching Digital Technologies to Senior Citizens

Perhaps most relevant to the present research are studies linking senior citizen's adaption of digital technologies to their participation in online communities. Lee et al. (2014) demonstrated this re-

lationship with their research of internet users over the age of 40. The authors concluded that elderly users in their study were most likely to continue using the internet if the service provided was easy to use and enjoyable (Lee et al., 2014).

Wang (2013) discovered that public libraries are an ideal venue for supporting blog sites that support elder-learning initiatives. Public libraries should assist senior citizens by teaching them to navigate digital resources through websites that are elder friendly and employ tools such as enlarged text, contrasting colors, and the increased use of sound and picture elements (Wang, 2013).

Earlier research by Gómez and Grau (2004) provided an example for this type of experiential learning and provide insight into how this process can be accomplished through collaborative efforts. The study noted the Cleveland Public Library's work in creating a virtual community for senior citizens focused upon interactive forums and chat rooms. These communicative hubs served to entertain elderly participants and build social connections while simultaneously training users in accessing digital information.

Research suggested that the most important part of educational blogging efforts by public libraries was to market the program to elderly users (Wang, 2013). A study by Sung (2016) confirmed that digital literacy initiatives should focus upon raising awareness through promotional outreach efforts targeting the needs of vulnerable groups.

These studies demonstrate the need for effective educational outreach programs, such as promotional events, advertising, and off-site visitations that promote technology awareness for senior citizens. Such a strategy is worthy of consideration by Alabama librarians seeking to increase elderly participation in internet-based digital programming.

METHOD

Analysis of Data

Data obtained in this research were analyzed using an iterative analysis approach (Tracy, 2013) which incorporates a grounded theory application (Glaser & Strauss, 1967) while also considering relevant peer-reviewed academic literature and theory. Survey responses and text content have been consistently reviewed and compared for applicability and relevance to research questions.

Data Collection

Data were collected via a ten-question online survey (see Appendix A) and a textual analysis of online programming guides (see Appendices B, C, D, and E) from four Alabama public libraries located in highly-populated urban areas.

Survey of Library Administrators

The online survey utilized a purposeful sampling of Alabama public library administrators designed to determine the group's perceptions, beliefs, and historical actions relating to the discovery, access, and use of digital materials by senior citizen patrons. The survey was conducted July 20, 2021 through August 7, 2021 via the online website surveymonkey.com. Library administrators were selected for this survey based upon the identification of their public library email address using various internet search tools.

Messages were sent to these email addresses utilizing a blind carbon copy (BCC) distribution system from this writer's university email address. The leading text line requested the attention of the public library administrator or assistant administrator. A university approved informed consent form was attached to this solicitation, as well as a hyperlink and access code. Only administrators and assistant administrators were invited to participate, but anyone receiving the invitation and access code could access and take part in the survey. The same email solicitation was repeated after one week, with the addition of a short notice informing recipients the survey would be closing soon.

Results were collected, tabulated, and delivered to this investigator by the mediating website surveymonkey.com. The identification and/or email address of participants was not shared with this

investigator, and he has no knowledge of which respondents took part in the survey. Survey data were analyzed for identifiable trends relating to RQ1, RQ2, and RQ3. In addition, survey data were compared and contrasted to information collected in the textual-analysis component of this study.

Textual Analysis of Programming Guides

Information relevant to senior citizen specific programming was obtained from the textual harvesting and coding of programming guides published on public websites of four Alabama public libraries (Tracy, 2013). Information retrieval occurred in September 2021 and was limited in scope to three years preceding October 2021. Only the program titles were harvested for this analysis.

Library websites were chosen based upon their library's dispersed geographical location and their proximity to large population centers (Birmingham, Huntsville, Mobile, and Montgomery). Each of these libraries maintain multiple physical locations (or branches) within their venues, and they offer a broad sampling of library services to Alabama senior citizens. Three of the four libraries examined did not offer complete program information for the three-year period under study. These exceptions, and the period's void of programming information, are noted in the leading comments of Appendices C, D, and E.

Analysis of the harvested program titles consisted of a keyword search within titles for the following words: AARP, aged, ageing, aging, Alzheimer's, dementia, elder, elderly, Medicaid, Medicare, old, older, osteoporosis, retired, retiree, retirement, senior, and seniors. Abbreviations of these terms were also acceptable. One or more keywords located within a title represents a significant outreach effort (SOE) for the corresponding library. A list of program titles identified through this process (from all libraries) is provided in Appendix F.

Multiple programs identified through this coding and analysis were offered on a repetitive basis, meaning the program was presented on more than one day without a title modification. Such programming was designated as an SOE-R event. Content related to digital-access education, training, or outreach for senior citizens was designated as an SOE-Digital event. Programs representing an SOE, SOE-R, or SOE-Digital event were noted and counted in a quantitative analysis to determine the extent of such programming.

FINDINGS

Survey Questionnaire Data

Survey data consisted of 58 participant responses that were solicited from 228 individual requests emailed to Alabama public library administrators during the month of July 2021. Five emails were returned immediately as undeliverable, and 170 of the administrators did not participate in the survey. Respondents answered survey questions between July 20, 2021, and August 7, 2021, on the website surveymonkey.com. The results (see Appendix A) were as follows:

Question 1. Are you the administrator of a public library in the state of Alabama?

Over ninety-six percent (96.55%) of survey respondents stated they were the head administrator of an Alabama public library. One respondent (1.72%) replied that they were an assistant administrator, and one respondent (1.72%) said that that they were not an administrator.

Question 2. Which description best describes your library's geographic location?

Over 65.52% of respondents stated their library was in a rural public area. Seventeen percent, 17.24%, said their library was in a medium-sized urban area, and 15.52% replied that their library was located in a small-sized urban community. Only one respondent, 1.72%, reported a large urban location, such as Birmingham, Huntsville, or Mobile.

Question 3. Within the last 3 years, has your library provided free public access to digital resources, such as Hoopla, OverDrive, or others?

The majority of respondents, 67.24%, reported their library has provided free access to digital library resources in the last three years. The remaining respondents, 32.76%, stated they have not.

Question 4. Within the last 3 years, has your library provided training to users on how to access free digital library resources provided by your institution or another?

Over 60.34% of respondents stated that their library has trained users on how to use these resources in the last three years. The remaining respondents, 39.66%, stated they have not.

Question 5. Do you believe that senior citizens (those age 55 and over) are interested in accessing and using digital library resources?

A large majority, 86.21%, of respondents believed that senior citizens are interested in using digital libraries. The remaining respondents, 13.79%, stated they did not believe senior citizens are interested.

Question 6. Do you believe that most senior citizens (those age 55 and over) in the state of Alabama have the technical knowledge and skill necessary to access and navigate library websites?

A majority, 65.52%, of respondents did not believe that senior citizens have the technical knowledge and skill necessary to access and navigate library websites. The remainder of respondents, 34.48%, did believe senior citizens have the necessary knowledge and skill.

Question 7. During the last 3 years, how many times has your library specifically targeted senior citizens (those age 55 and over) for training or educational purposes regarding the access and use of digital-library materials?

Nearly half, 48.28%, of respondents admitted that their library has never engaged in such outreach. Three percent, 3.45%, stated they had done this only once. Eight percent, 8.62%, replied they had provided such outreach twice. Librarians who engaged in this outreach three to five times represented 15.52% of the respondents, and an additional 8.62% said they had done so six to ten times. Only 15.52% of respondents reported they had participated in such outreach more than ten times in the last three years.

Question 8. During the last 3 years, how many senior citizens (those age 55 and over) were educated or trained in the access and use of digital libraries by your staff members?

Forty-four percent, 44.83%, of respondents replied they had trained between 10 and 50 senior citizens in this area during the last three years. Twenty-two percent, 22.41%, reported training between one and nine elderly patrons, and almost 18.97% reported training no senior citizens at all. Eight percent, 8.62%, claimed to have trained between 51 and 100 elderly patrons, and only 5.17% stated they had trained more than one-thousand senior citizens.

Question 9. During the last 3 years, the use of digital library resources by senior citizens (those age 55 and over) have _____ at my library.

The majority of respondents, 58.62%, believed this usage has increased during the last three years. Eighteen percent, 18.97%, held the opinion that usage has not changed. Only a small Percentage, 3.45%, believed such usage has decreased, with the remaining respondents, 18.97%, having no opinion.

Question 10. Do you believe that additional training or educational resources are needed at your library to introduce senior citizens (those age 55 and over) to digital library resources?

A large majority, 89.66%, of respondents answered yes to this question. The remaining respondents, 10.34%, replied no.

Textual Analysis Data

Birmingham Public Libraries
   Coding and textual analysis of online programming schedules from the Birmingham Public Libraries resulted in a total of 28 significant outreach efforts (SOEs) in the three years preceding October 2021 (see Appendix B). Seven of these SOEs were classified as repetitive (SOE-Rs), and one was classified as SOE-Digital.
   The single SOE-Digital program was titled "AARP Technology Workshop," and it was presented in two 90 minute programs on October 27, 2018, by the West End Branch of the Birmingham Public Library. The library described this program as a "hands-on workshop on how to get the most from your mobile devices, including maps, voice dictation, apps, photos, and more" (Birmingham Public Library, 2020).

Huntsville-Madison County Public Libraries
   Textual analysis of online programming schedules from the Huntsville-Madison County Public Libraries (see Appendix C) resulted in a total of 8 significant outreach efforts (SOEs) from December 2018 through September 2021. Three of these 8 were classified as repetitive (SOE-Rs) and zero were classified as SOE-Digital. No online public records were available for programming prior to December 2018.

Mobile Public Libraries
   Textual analysis of online programming schedules from Mobile Public Libraries resulted in a total of zero significant outreach efforts (SOEs) from January 2021 through September 2021 (see Appendix D). No online public records were available for programming prior to January 2021.

Montgomery City-County Public Libraries
   Textual analysis of online programming schedules from the Montgomery City-County Public Libraries resulted in a total of two significant outreach efforts (SOEs) from April 2019 through September 2021 (see Appendix E). Of these two, there were no SOEs classified as repetitive (SOE-Rs) and none classified as SOE-Digital. No online public records were available for programming prior to April 2019.

DISCUSSION

Major Takeaways
   This study investigated the possibility of undetected access obstructions preventing senior citizens from discovering and using digital information maintained by Alabama public libraries.
A literature review established formative groundwork for this study and began by suggesting that the public library has a duty to address demographic change and provide outreach services to the public (Bashaw, 2010; Molyneux, 2005; Okobi, 2014). This point was extended by this researcher as applicable to the digital realm based upon society's increased use of digital technologies, which are increasingly replacing traditional paper-based publishing efforts (Ross & Sennyey, 2008). In effect, outreach efforts educating elderly library users in the use of digital libraries is a responsibility of public libraries.
   Additional research findings are supported by data collected during this study and have been organized below based upon their relevance to core research questions:

RQ1. Do Alabama public library administrators understand the need for digital library education and training for senior citizen patrons?
   Over 85% of confirmed public library administrators agree (in survey Question 5) that senior citizens are interested in accessing and using digital library resources. This number suggests administrators are well aware of the need for such training.

At least 64% of these confirmed administrators agree (in survey Question 6) that most senior citizens in Alabama do not have the technical knowledge needed to access and navigate library websites. This response also suggests that administrators are aware of the need for digital training.

Perhaps the most direct response to RQ1 is found in the response to survey Question 10, where over 89% of confirmed administrators agree that additional training or educational resources are needed to introduce senior citizens to digital library materials.

RQ2. Are Alabama public library administrators pursuing and implementing outreach and programming initiatives targeting senior citizens for digital library education and training?

Based on survey responses, at least 47% of confirmed administrators (in survey Question 7) admit that they have never directly targeted senior citizens for training or education regarding the access and use of digital library materials. When this result is combined with respondents stating they have only provided such training two times or less in the last three years, a majority is formed in which at least 59% of confirmed administrators have not implemented sufficient outreach and programming initiatives.

The reader should note that over 65% of all respondents indicated (in survey Question 3) that they work in a rural library. As such, survey results pertaining to RQ2 may be affected by factors such as limited finances and low staffing.

Textual analysis results confirm that there is a less-than-ideal effort from public libraries pertaining to outreach and programming initiatives targeting senior citizens. Only one program relating to the access and use of digital library materials was identified during the last three years of published online guides, and only 41 programs were discovered in this study that specifically targeted senior citizens in any regard.

Considering both the survey data and data harvested through textual coding and analysis, it is evident that Alabama public libraries are not sufficiently targeting senior citizens for education, training, or outreach initiatives regarding the access and use of digital library materials.

RQ3. Are programming changes necessary to support an increase in senior citizen use of digital materials at Alabama public libraries?

Previously discussed survey data have largely concluded that Alabama library administrators believe: (1) senior citizens are interested in using digital libraries, (2) senior citizens need training in order to access library websites, and (3) additional training and educational resources are needed to introduce senior citizens to these materials.

Supplemental to this conclusion, data harvested through online programming guides suggest that digital library education and training specific to senior citizens is nearly non-existent in Alabama public libraries, and it has been for some years. Clearly, significant programming changes are necessary in the state.

Limitations of the Study

The three-year period examined by this research includes service periods impacted by the COVID-19 Pandemic. Library closures and service disruptions relative to this pandemic should be considered by the reader in their analysis of the presented data, but this researcher suggests that the importance and need of digital programming should increase when traditional library facilities are closed to in-person visitors.

Data obtained in the survey of library administrators are dependent upon a 25% response rate from solicited library administrators in the state of Alabama. Of this response rate, one respondent indicated they were not a library administrator. This anomaly is noted for computational purposes, and data reported are adjusted by use of the term "confirmed administrators." This terminology indicates that the investigator has mathematically removed one response from the category under examination to allow for a minimum-percentage value excluding any possible over-value reportage due to non-administrator par-

ticipation. The degree of error introduced from this anomaly will at no time exceed 1.72% from the value reported on the survey results (see Appendix A).

Textual analysis results are exploratory and do not accurately define the current status of public library programming in Alabama. In this respect, this study concedes the need for a more thorough and controlled statewide sampling in future research.

Data obtained from the coding and textual analysis of program titles should not be used to compare and contrast programming from one library system to another. Inconsistencies, such as: (1) the quantity of program data available for each library, (2) variations in library administrative controls, and (3) the potential for under-reported programming make such comparisons meaningless. More importantly, such a comparison is not the objective of this study.

The principle investigator of this study wishes to disclose that he is a senior citizen adult, as defined by the parameters of this study, and he was previously employed (2019-2020) at a mid-sized public library within the state of Alabama. Survey data may (or may not) include a response from this employer, as all respondent participation was collected anonymously.

CONCLUSION

Service demands from senior citizens are predicted to increase for Alabama public libraries in the coming decades (Alabama Department of Public Health, 2021; Okobi, 2014), and digital libraries are sure to be an important part of Alabama's response to this need. In this respect, state librarians must work conscientiously and collaboratively to prepare senior citizens for interacting with electronic resources.

Data collected in this study suggest that current outreach, education, and training initiatives in the state of Alabama are less than sufficient in number, scope, and content to prepare the state's elderly citizens for a digital-information future. In this respect, Alabama public libraries are not successfully implementing a unified approach to address this issue. Moreover, deficiencies in this regard are contributing to a dysfunctional relationship between public libraries and elderly patrons which is inhibiting information accessibility.

Senior citizen readers are misunderstood as an age-group demographic, underrepresented in library age classification schemas, and often perceive of themselves as "outsiders" in the digital world (Blažič & Blažič, 2020; Cavanagh & Robbins, 2012; Perry, 2014; Sikes, 2020; Wang, 2013). These issues serve to silence the fastest growing age demographic in the state and trivialize their need for more robust educational services—particularly library outreach services and programming pertaining to digital information access.

These factors combine to form a comfortable—and largely unintentional—silence between Alabama public libraries and senior citizen patrons in which inaction and indifference obstruct the capability to discover and access digital information.

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Appendix A
Survey Questionnaire for Public Library Administrators

1. Are you the administrator of a public library in the state of Alabama?	
Yes. I am the head administrator of a public library in the state of Alabama.	(56) 96.55%
Yes. I am an assistant administrator of a public library in the state of Alabama.	(1) 1.72%
No. I am not an administrator of a public library in the state of Alabama.	(1) 1.72%
2. Which description best describes your library's geographic location?	
My library is located in a rural area.	(38) 65.52%
My library is located within a medium-sized urban area.	(10) 17.24%
My library is located within a small-sized urban area.	(9) 15.52%
My library is located in a large urban area.	(1) 1.72%
3. Within the last 3 years, has your library provided free public access to digital resources, such as Hoopla, OverDrive, or others?	
Yes.	(39) 67.24%
No.	(19) 32.76%
4. Within the last 3 years, has your library provided training to users on how to access free digital library resources provided by your institution or another?	
Yes.	(35) 60.34%
No.	(23) 39.66%
5. Do you believe that senior citizens (those age 55 and over) are interested in accessing and using digital library resources?	
Yes.	(50) 86.21%
No.	(8) 13.79%
6. Do you believe that most senior citizens (those age 55 and over) in the state of Alabama have the technical knowledge and skill necessary to access and navigate library websites?	
Yes.	(20) 34.48%
No.	(38) 65.52%
7. During the last 3 years, how many times has your library specifically targeted senior citizens (those age 55 and over) for training or educational purposes regarding the access and use of digital-library materials?	
Never.	(28) 48.28%
Once.	(2) 3.45%
Twice.	(5) 8.62%
Three to five times.	(9) 15.52%
Six to ten times.	(5) 8.62%
More than ten times.	(9) 15.52%
8. During the last 3 years, how many senior citizens (those age 55 and over) were educated or trained in the access and use of digital libraries by your staff members?	
0.	(11) 18.97%
1-9.	(13) 22.41%
10-50.	(26) 44.83%
51-100.	(5) 8.62%
101-1000.	(3) 5.17%
More than 1000.	(0) 0.0%
9. During the last 3 years, the use of digital library resources by senior citizens (those age 55 and over) have (fill in the blank) at my library.	
Increased.	(34) 58.62%
Remained the same.	(11) 18.97%
Decreased.	(2) 3.45%
N/A.	(11) 18.97%
10. Do you believe that additional training or educational resources are needed at your library to introduce senior citizens (those age 55 and over) to digital library resources?	
Yes.	(52) 89.66%
No.	(6) 10.34%

Appendix B
Birmingham Public Libraries Programming Count

2018	Significant Outreach Efforts (SOE) = 4
2018	Significant Outreach Efforts-Repetitive (SOE-R) = 2
2018	Significant Outreach Effort-Digital (SOE-Digital) = 1
2018 (Total)	**SOE, SOE-R, and SOE-Digital = 7**
2019	Significant Outreach Efforts (SOE) = 12
2019	Significant Outreach Efforts-Repetitive (SOE-R) = 3
2019	Significant Outreach Effort-Digital (SOE-Digital) = 0
2019 (Total)	**SOE, SOE-R, and SOE-Digital = 15**
2020	Significant Outreach Efforts (SOE) = 3
2020	Significant Outreach Efforts-Repetitive (SOE-R) = 1
2020	Significant Outreach Effort-Digital (SOE-Digital) = 0
2020 (Total)	**SOE, SOE-R, and SOE-Digital = 4**
2021	Significant Outreach Efforts (SOE) = 1
2021	Significant Outreach Efforts-Repetitive (SOE-R) = 1
2021	Significant Outreach Effort-Digital (SOE-Digital) = 0
2021 (Total)	**SOE, SOE-R, and SOE-Digital = 2**
Total All	**SOE, SOE-R, and SOE-Digital = 28**

Appendix C
Huntsville-Madison County Public Libraries Programming Count

No programming data were provided prior to December 2018.

2018	Significant Outreach Efforts (SOE) = 0
2018	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2018	Significant Outreach Effort-Digital (SOE-Digital) = 0
2018 (Total)	**SOE, SOE-R, and SOE-Digital = 0**
2019	Significant Outreach Efforts (SOE) = 3
2019	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2019	Significant Outreach Effort-Digital (SOE-Digital) = 0
2019 (Total)	**SOE, SOE-R, and SOE-Digital = 3**
2020	Significant Outreach Efforts (SOE) = 2
2020	Significant Outreach Efforts-Repetitive (SOE-R) = 1
2020	Significant Outreach Effort-Digital (SOE-Digital) = 0
2020 (Total)	**SOE, SOE-R, and SOE-Digital = 3**
2021	Significant Outreach Efforts (SOE) = 1
2021	Significant Outreach Efforts-Repetitive (SOE-R) = 1
2021	Significant Outreach Effort-Digital (SOE-Digital) = 0
2021 (Total)	**SOE, SOE-R, and SOE-Digital = 2**
Total All	**SOE, SOE-R, and SOE-Digital = 8**

Appendix D
Mobile Public Libraries Programming Count

No programming data were provided prior to January 2021.

2018	Significant Outreach Efforts (SOE) = 0
2018	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2018	Significant Outreach Effort-Digital (SOE-Digital) = 0
2018 (Total)	**SOE, SOE-R, and SOE-Digital = 0**
2019	Significant Outreach Efforts (SOE) = 0
2019	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2019	Significant Outreach Effort-Digital (SOE-Digital) = 0
2019 (Total)	**SOE, SOE-R, and SOE-Digital = 0**
2020	Significant Outreach Efforts (SOE) = 0
2020	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2020	Significant Outreach Effort-Digital (SOE-Digital) = 0
2020 (Total)	**SOE, SOE-R, and SOE-Digital = 0**
2021	Significant Outreach Efforts (SOE) = 0
2021	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2021	Significant Outreach Effort-Digital (SOE-Digital) = 0
2021 (Total)	**SOE, SOE-R, and SOE-Digital = 0**
Total All	**SOE, SOE-R, and SOE-Digital = 0**

Appendix E
Montgomery City-County Public Libraries Programming Count

No programming data were provided prior to April 2019.

2018	Significant Outreach Efforts (SOE) = 0
2018	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2018	Significant Outreach Effort-Digital (SOE-Digital) = 0
2018 (Total)	**SOE, SOE-R, and SOE-Digital = 0**
2019	Significant Outreach Efforts (SOE) = 2
2019	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2019	Significant Outreach Effort-Digital (SOE-Digital) = 0
2019 (Total)	**SOE, SOE-R, and SOE-Digital = 2**
2020	Significant Outreach Efforts (SOE) = 0
2020	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2020	Significant Outreach Effort-Digital (SOE-Digital) = 0
2020 (Total)	**SOE, SOE-R, and SOE-Digital = 0**
2021	Significant Outreach Efforts (SOE) = 0
2021	Significant Outreach Efforts-Repetitive (SOE-R) = 0
2021	Significant Outreach Effort-Digital (SOE-Digital) = 0
2021 (Total)	**SOE, SOE-R, and SOE-Digital = 0**
Total All	**SOE, SOE-R, and SOE-Digital = 2**

Appendix F
Titles Harvested from Public Library Online Programming Guides

Birmingham Public Libraries *(September 2019 through September 2021):*
Senior Line Dance Class (9/4/2018) [R]
Medicare Education (9/17/2018) [R]
Senior Safety (10/2/2018)
Money Matters Retirement Planning Workshop – How to Pay for Healthcare Costs (10/10/2018)
AARP Technology Workshop (10/27/2018) [Digital]
Active Living for Seniors-Christmas Crafts (12/12/2018)
Christmas Gift Wrapping for Seniors (12/14/2018)
Money Matters Retirement Planning Workshop – Managing Retirement Plan Assets (1/16/2019)
Active Living for Seniors-Film Viewing (1/23/2019)
Money Matters Retirement Planning Workshop – Managing Savings and Investments (2/13/2019)
Money Matters Retirement Planning Workshop – Protecting Yourself from Fraud (3/13/2019)
Money Matters Retirement Planning Workshop – Using Work to Your Advantage (4/10/2019)
Money Matters Retirement Planning Workshop – When to Claim Social Security (5/8/2019)
Let's Talk about Medicare: Questions and Answers (8/1/2019) [R]
Understanding Alzheimer's and Dementia (9/4/2019)
Gentle Yoga Class for Seniors and Adults (9/5/2019) [R]
Active Living for Seniors – Fall Craft (10/16/2019)
Cane-Fu! Self-Defense for Seniors (10/31/2019) [R]
Active Living for Seniors – Tablescapes (11/13/2019)
Active Living for Seniors – Movie & Popcorn (11/27/2019)
Active Living for Seniors – Christmas Jeopardy (12/11/2019)
Active Living for Seniors – Christmas Crafts and Cookies (12/18/2019)
Active Living for Seniors – Puzzles & Pastries (3/18/2020)
Cane-Fu for Seniors (7/2/2020) [R]
Senior Citizens Week – Let's Groove…. (8/18/2020)
Senior Citizens Week – Ti-Chi and Cane Fu…. (8/19/2020)
Senior Citizens Week – Positive Maturity/Senior Swag Giveaway (8/21/2021)
Advise Medicare 101 Meeting (9/9/2021) [R]

Huntsville-Madison County Public Libraries *(No Records Prior to December 2018):*
Brain Building for Seniors (1/3/2019)
The ABCs of Medicare (9/15/2019)
Brain Building for Retirees (9/19/2019)
Sr. Serv. Madison Manor Story Time (1/27/2020) [R]
Understanding Alzheimer's and Dementia (2/29/2020)
SenioRX (4/13/2020)
Madison City Senior Center Visit (5/7/2021) [R]
Medicare Education Class (6/25/2021)

Mobile Public Libraries *(No Data) (No Records Prior to January 2021)*

Montgomery City-County Public Libraries *(No Records Prior to April 2019):*
Medicare 101 (12/4/2019)
Medicare 101 Workshop (12/11/2019)