STEMPS Faculty Publications   STEM Education & Professional Studies

2020

Cyberbullying, Digital Citizenship, and Youth With Autism: LIS Education as a Piece in the Puzzle

Abigail Phillips

Amelia Anderson
Old Dominion University

Original Publication Citation

Cyberbullying, Digital Citizenship, and Youth with Autism: LIS Education as a Piece in the Puzzle

Abigail L. Phillips and Amelia Anderson

ABSTRACT

Librarians are beginning to address the lack of services for youth with autism spectrum disorder (ASD) by providing flexible and tailored programming and services. One important need among youth with ASD is a better understanding of how to navigate the online environment safely and responsibly. Given different engagement styles with social interaction and communication, youth with ASD may be more susceptible to cyberbullying and misinterpretations during online communications than their peers. This study investigates whether librarians can (or should) play a role in digital citizenship education for youth with ASD and provides suggestions for LIS educators preparing future librarians on how to develop services and programming for neurodiverse youth.

I n the United States , the prevalence of autism spectrum disorder (ASD) is now estimated to be 1 in 59 people (Baio et al. 2018). Youth with ASD often have social, developmental, and communication differences that affect their experiences when engaging in common everyday activities, including both during face-to-face interactions and interacting online (Orsmond and Kuo 2011).

Although the body of literature is growing, current research on the provision of library services to youth with ASD is limited, made up of a few practitioner books and similar guides for special needs youth programming (Farmer 2013; Klipper 2014). As the diagnosis of ASD becomes more prevalent, there is increased urgency for the development of library services that support the intellectual, emotional, and psychological needs of youth with ASD. Librarians are beginning to offer programs such as sensory storytimes for youth on the spectrum, but more work must be done when considering inclusive, educational services.

Like other teens, youth with ASD are active and engaged users of social media, online video games, and discussion boards. These digital platforms offer youth on the spectrum ways to communicate in a manner that may feel more comfortable and more complementary to their communication styles and needs (Didden et al. 2009). However, youth with ASD struggle with

many of the same dilemmas when going online as their neurotypical peers. Cyberbullying, trolling, and other forms of online harassment are fairly common in the everyday life of a teen (Lenhart et al. 2011), and for youth with autism, one might expect that this would be no different.

In this exploratory study, librarians from across the United States discuss work they are currently doing for youth with autism or related special needs and reflect on the potential to expand into providing programming for these teens related to digital citizenship. For this study, digital citizenship is defined as "the norms of appropriate, responsible behavior with regard to technology use" (Ribble 2017, par. 1). Recently, some K–12 school librarians have begun incorporating digital citizenship as part of their information literacy instruction (Hill 2015). However, this study is the first to focus on public librarians.

Statement of Purpose

This study offers one of the first empirical observations to contribute to the field regarding how librarians are currently working with youth with ASD and how librarians feel about expanding services for digital citizenship. Virtual, semistructured interviews were conducted over a period of 6 months with seven librarians from across North America who work with youth with ASD. During analysis, areas were discovered that have the potential to be included in master of library and information studies (MLIS) curriculum. These areas are supported by insights gathered during the interviews from participating librarians. Some of these insights include needed guidance on collaboration with schools and school ASD curriculum development, growing demands for more tailored special needs youth programming, information literacy skills for the digital environment, and approaches to conducting outreach to social service agencies and youth organizations.

Research Questions

    RQ1: What types of services and program are librarians currently providing youth with ASD?
    RQ2: When considering digital citizenship education for youth with ASD, what reflections, feelings, and/or concerns do librarians have?

Literature Review

Overview

Previous exploratory research has shown that youth with ASD do use libraries, even discussing them in online environments with other youth with ASD (Anderson 2016). The literature that provides context for this study investigates how librarians might address a crucial information literacy need for members of this population and examines the ways in which librarians, through empathy, awareness of need, and library services, can address concerns about digital citizenship for youth on the autism spectrum.

Library Services and Empathy

Empathy within librarianship has been infrequently studied within library and information science. However, empathy and compassionate care are core aspects of library work. Abigail Phillips (2016, 17) introduced empathetic services, "structured activities carried out one-on-one or in groups and everyday unstructured interactions in which the role of the librarian is to provide social, emotional, and psychological support," as an essential component of library work. This is particularly true when considering services to youth with special needs.

Library Services and ASD

Librarians are increasingly offering programming and services for individuals on the autism spectrum, particularly for children. A recent study notes that sensory practices have long been incorporated into general storytimes: "The specific and intentional use of the word 'sensory' spiked in the late 2000s as an increasing number of libraries began offering 'sensory storytimes' for children. These storytimes . . . provide enriched literacy experiences for sensory-seeking or sensory-challenged children, often on the autism spectrum" (Hickey, Golden, and Thomas 2018, 19).

Sensory storytimes and similar programming not only show that the library is responsive to needs of children with autism but also provide literacy and communication tools that support lifelong learning and social engagement (Ennis-Cole and Smith 2011; Cottrell 2016b). In public libraries around the world, librarians are building connections and partnerships with autism organizations in their communities, developing communication tools such as social stories, and conducting trainings for staff to better understand how to serve children on the autism spectrum (Anderson and Everhart 2015; Mears 2017).

However, library services for older youth with ASD (aged 12–18) are often neglected. As one article about library programs states, "Even though therapies and activities for young children with autism are starting to grow, programs for teens and young adults are still scarce" (Cottrell 2016a, par. 5). This issue is not restricted to libraries; there is a lack of literature and engagement for preteens, teens, and adults on the spectrum in general. As stated by Charlie Remy, a librarian on the autism spectrum, there is a "continued societal focus on children with autism, although this is slowly changing" (Eng 2017, par. 35).

Youth with ASD and Online Engagement

Teens with ASD are no different from peers in that they seek out social media platforms for support, understanding, and information seeking (Davidson 2008). Melissa H. Kuo and colleagues report that "adolescents with ASD who used computers for social purposes reported more positive friendships than those who used computers for other purposes. Notably, peers were the companions with whom adolescents with ASD most frequently engaged in these

computer activities" (Melissa et al. 2014, 922). Yet this growth in social media use opens up potential for cyberharassment, specifically cyberbullying (NATTAP 2019).

Digital Citizenship in Library Services

Digital citizenship is one effort in which teens can be educated about responsible participation online. Digital citizenship is defined by Common Sense Media as "the ability to think critically, behave safely, and participate responsibly in the digital world" (Common Sense Media 2015, par. 2). In a Pew Research Center study of American teens who use social media, when asked if their peers are kind or unkind to each other online, "88% of teens have seen someone be mean or cruel to another person on a social network site" (Lenhart et al. 2011, 3). Digital citizenship education is a means to help address these issues through education (Oxley 2011). By applying concepts such as ethics, responsibility, and health and wellness to online behaviors, digital citizenship provides teachers a platform for guiding youth toward positive online interactions. Although geared toward teachers, some school librarians adapt Common Sense Media content to teach digital citizenship (Phillips and Lee 2019).

Schools are beginning to introduce digital citizenship into their curricula, and some school librarians are now offering courses or one-shot instruction for students (Krueger 2017). In the United States, two states, Washington and Utah, recently passed legislation that requires digital citizenship to be included as part of K–12 education (Stratton and Stephenson 2015; Liias et al. 2017). Common Sense Education (n.d.) regularly updates lesson plans and other activities for students beginning in kindergarten and through high school. However, instructional gaps remain (Vandebosch, Poels, and Deboutte 2014). Librarians are a community resource that has received scant research attention regarding digital citizenship, although more work is beginning to be conducted. As information literacy advocates and digital citizenship instructors, librarians provide youth with resources and programming on ethical and responsible online behavior (Phillips 2014).

Methods

The researchers selected semistructured interviews to better understand the experiences and perceptions of public librarians regarding services to youth on the spectrum, particularly when considering online safety and digital citizenship. The flexibility of the interview questions provides the researchers with the ability to delve deeper into how library services are currently provided in public libraries and ways in which digital citizenship education could be incorporated into existing programming.

Participants

In total, seven public librarians and library staffers completed interviews. These interviews took place over Skype and Google Hangouts, ranging from 30 minutes to 1 hour in length.

These participants held a variety of positions in public libraries, including director, teen librarian, programming librarian, youth services specialist, and children and youth programming assistant. In addition, the library workers ranged in library experience from MLIS students to librarians nearing retirement. The diversity of participants offered the researchers an opportunity to explore a variety of perspectives regarding serving digital youth on the spectrum.

The librarians who responded to the call for participation demonstrated some interest in the area of working with youth on the autism spectrum and/or digital literacy. This sample was not random; instead, the population was determined by librarians who themselves used social media, as they were recruited from Twitter, Facebook, and other online venues, and were interested enough in the topic to agree to an interview. Although the librarians had different backgrounds and experiences, they shared a general understanding of working with youth with diverse abilities.

Data Collection

Data collection took place from May through November 2017. The researchers contacted public librarians and library staff working with youth across the United States through electronic mailing lists (e.g., Young Adult Library Services Association [YALSA], Association of Library Services to Children, and state library associations) and social media postings to established library-specific groups.

In these postings, a simple participation invitation was shared: "We would like to invite you to participate in a research study we are conducting to explore how librarians can better prepare youth with Autism Spectrum Disorder (ASD) to navigate online communications." From responses to this call, seven participants were generated who met the sampling criteria and were interested in participation.

Data Analysis

Transcripts were coded following Johnny Saldaña's (2015) approach to qualitative research. Given the uniqueness of the research topic, this style of coding allowed for discovery of emergent themes. Both researchers participated in multiple instances of coding the interviews, focusing on theme development. These themes will be investigated further in the findings.

Findings

Findings are organized by theme, with findings relative to autism and general programming. Then, findings more specifically about digital literacy and digital citizenship programming are presented.

Digital Citizenship

Despite responding to the call for participation based on youth with autism and digital literacies, librarians in this study are not currently offering digital citizenship programs for youth

with ASD or otherwise. There is recognition of national campaigns that provide "opportunities [for teens] for learning about digital citizenship" such as those initiated by YALSA but not much in terms of actual program implementation. Relating to the finding that parents play an active role, one librarian stated that she does not offer this type of programming because "I go by whatever parents tell me they want." Although they have not requested it yet, she notes that if those parents wanted a "course on internet safety . . . I would ask [my staff] to do it."

Parents would be involved not just in planning the programs but also in implementation. As one librarian describes, "piggyback" programs are popular at her location, in which parent programs are planned for the same time as youth programs: "If the kids are in a program, I'll do a parent program also. So I might do one for the parents [also] on internet safety."

This willingness to offer programs does not lead to enthusiasm to jump in. Librarians are still hesitant about their own expertise in the area and potential to lead such programming themselves. One librarian notes that she has never heard of any programs given by librarians about digital citizenship for youth with ASD or neurotypical youth. She further states that "I can probably guarantee you that they [librarians] don't feel knowledgeable enough to run some kind of program."

Librarians in this study were not actively involved in digital citizenship programming for youth with ASD or neurotypical youth, but they did feel a sense of responsibility there, albeit to varying degrees. One librarian states that there is a role for librarians in educating youth in general about internet safety "because they're in here, and they have access to the computers when they're in here. And we know they're on there, so we really should just be showing them how to navigate it safely." Other participants noted that the responsibilities of public librarians were quite different than those of school librarians in this area: "School librarians have a different responsibility by law to their students, you know they're acting as parents in the absence of a parent. And so the stuff that goes on in school, it's their direct responsibility to understand what the kids are doing, how they're spending their online time, stuff like that. That doesn't happen in a public library at all. We don't have that responsibility. It doesn't mean that the libraries aren't worried about what they're doing online. . . . But they don't have that same authority, you know?"

Finally, although one librarian echoed the idea that this type of programming is important, she also noted that one concern, not just for her but for librarians in general, might be "the question of what is our role as a library." As she puts it, "You know, do we have the capacity to continue on with all of these things, while we're still doing summer reading. We're still ordering books. We're still helping the public. So, you're just balancing. Balancing to make sure we don't overcommit ourselves and we're really trying to serve our community and align the library with what's important in our community, and that could be different no matter what our communities are, across the country."

Collaboration and Supplementation of School Digital Citizenship Instruction

Trust is key between libraries and schools; connection between librarians and teachers is a notable finding. Collaboration between schools and libraries extends the support of special needs youth. Although some school districts may have few interactions with their local library system, the librarians interviewed in this study acknowledged the benefit that this positive relationship can have for youth with ASD. A reflection by one librarian highlights this need: "I would ask the school district if they had somebody they could recommend for a teacher. I like to use people from the district because I know them and they know me and they know the kids and I trust that they're reliable."

However, one librarian expressed criticism regarding the district her library serves. The concern about a buddy program offered within the school contrasted with the buddy program provided by the library where she works is evident. Once again, this librarian demonstrates specialized knowledge about youth with ASD such as specific needs, approach to interaction, and continued connection between the buddy pairs. By comparing how her library program is structured with what is offered in her local schools, she reveals a perceived disconnect between the school and the library: "The [buddy program] that we do have in the district it leaves a lot to be desired. The kids aren't with the same buddy all the time, and what happens is special needs kids stay on one side of the room and typical kids stay on the other side of the room and they don't really interact that much."

In contrast, another librarian expanded the possibilities of demonstrating how library services can support and expand upon what is already taught in classrooms. As she remarked, "Our school districts are going one-to-one with technologies in general, where the high school students are getting Chromebooks or iPads to take home. So, you know, what we do in the library is an extension of supporting what goes on in our school. So how can we support not only the teens, but the teachers as well." In this quote, the presence of support is already acknowledged by the librarian but perhaps is not recognized by the teachers or school administrators. From interviews with the public librarians, an effort is being made toward collaboration with schools and teachers. There is a desire to connect with what is going on in the school districts. By doing so, these librarians are building on what can be done for neurotypical and neurodiverse students and their parents.

Inclusive Programming

Librarians conveyed a need for inclusive programming that was not strictly focused on youth with ASD but rather on those both with and without other special needs. In many cases, for youth on the spectrum, these are the same individuals that they are spending time with on a regular basis (e.g., going to school, community events, church). Separating youth with ASD into programming specifically for them did not appear to be a necessary element in young

adult programming. Including youth with ASD in neurotypical youth programming was a way to provide inclusive experiences, as described by one librarian:

> Well, there's actually one member of [our group] who is on the spectrum, but they're just a normal part of the group. Let's see, we do make accommodations for some of the games that we play, like the question game, where you need to, like each person has to ask a question and if you pause too long then you go on to the next person. And it's not her favorite game but she's happy to say if the person is taking too long. Otherwise we just give her longer to answer, or. . . . It's really just natural and it's the kids she goes to school with, the other students, and it's just a normal thing, I guess.

Another librarian explained the challenges of providing targeted programming for youth on the spectrum:

> It's hard because I've tried programs for teens at another library, and it was just for teens on the spectrum and I didn't really get any kind of response. . . . I think I would just be looking for programs where teens with, teens on the spectrum, where they're likely to come because that's their special interest and they would just be there with other kids, other quote-unquote typical kids, just hanging out and having fun. But they would feel welcome and included and they'd just blend in, blended programs. I don't really see myself doing any extra programs just for that, just for kids on the spectrum.

Again, the emphasis is on what this librarian refers to as "blended programs." Programs that not only include neurotypical teens but youth on the spectrum and with other youth special needs provide an environment where they can "blend in." The librarians interviewed recognized this need and worked to include it in program planning.

Parent Involvement

A striking finding from our interviews is the degree to which parents are involved in not only their teens' involvement but the actual structuring of the programming. Due largely to the active communities of parents of youth with ASD, these already-in-action groups worked in partnership with the library as collaborators. Input from the parents was purposefully sought, as indicated by one librarian: "The Thursday night group was, the older teen boys wanted something just for them, so I started it. And I started just with video games. And then I said, OK well, what else would you like? I asked the parents, not the kids. I asked the parents, what else would you like, they don't want me to do anything but video games. Because they use that as leverage. If they don't finish their homework, they don't get to come to video game night."

In addition, participation allowed opportunities for parents themselves to socialize with other parents of children with ASD or other special needs. One of the librarians in our study (a mother of a child with ASD) discussed a group she has been a part of within her community that inspired her work with youth with ASD in the library. During some interviews, our librarian participants mentioned local groups of parents of youth with ASD who regularly brought their children to library events. Outside of school events, the library was an additional outlet for these parents to get together and connect.

Peer Mentors

Related to inclusive programming is the need for youth with ASD to regularly engage with neurotypical youth. These peer mentors are included in activities both in and outside of the library. At one library, peer mentors are matched up with a youth on the spectrum for the course of a year. These peer mentors include their mentees in activities both in and outside of the library. As opposed to placing youth in designated groups within the library's programming, peer mentors and general young adult programming as an approach to serving special needs youth occurred frequently during interviews. For example, one librarian said,

> Each special needs child is paired up with one or two teens and they stay together for the entire year. So if Jimmy is paired with George, they are together the entire year. They build a relationship. And it's worked. This is the third year that we're doing it so I know that some of the kids do have relationships outside of the library time. They go places, they go to the movies together, they have each other over at the houses. I can tell you at my own end, my son has invited his special needs friends over, and he also invited his typical buddies to come over. And they come over to the house to hang out, to watch a movie, play pool. You know, on the weekend they come over. So, they do develop a friendship.

This librarian illustrates the ways in which mentorship goes beyond more common youth programming (e.g., crafts, video games) and expands into the school and personal life of a special needs young adult. Supporting the development of a strong relationship between neurotypical and neurodiverse youth is seen as an important role for the library to play. This role requires that a librarian step beyond the normal confines of the library walls and push even further into the community.

Librarian Knowledge of ASD

Librarians demonstrated an understanding of the needs of youth with ASD and comfort developing programming for special needs youth. Although the researchers' call for study participants was geared to librarians already providing or considering providing services to these

youth, a few of the interviewees have children or young adults with ASD. As demonstrated by one librarian: "We've always run a Monday night special needs program, for the last 14 years. Because my son was 3 years old. And that came from the fact that, just talking to other parents and we would say, there's no place to take these kids . . . so I created the program here."

This account provided a unique perspective regarding how library programming can be constructed for these youth. Not only are librarians and library staff knowledgeable about ASD, but some have personal experience as parents of youth with ASD. This may influence how programming is conceived and implemented. This librarian places library programming within the context of their experience as a parent.

In addition, libraries are seeking out training to provide for staff that goes beyond the perceived norm of librarian professional development. They are responding to an increased demand for serving patrons with a range of disabilities including mental illness and differently abled patrons. One librarian describes training her library has offered: "We've had training for people with disabilities. We've also had mental health issue training at this particular branch, and it is offered in our system too, and so I think we're more aware of that. There's already an acceptance of doing that kind of programming for different needs here."

The acceptance she refers to reflects a greater understanding and increased knowledge of the variety of patron needs. Not only do patrons, particularly youth, have needs that are not being met through other community resources, but this librarian articulates the need for a welcoming and understanding environment. It is often assumed that librarians are comfortable working with all populations, but interview participants reveal that this is not always the case. One said, "Before I started, the children's librarian, I don't think she felt comfortable with children with special needs, and I do. So I made it a point to go introduce myself to the teacher and ask if she wanted me to do a storytime or anything special."

This librarian, a former special needs teacher, sensed discomfort from the previous children's librarian regarding working with special needs youth. This librarian took the initial step to reach out to a local teacher to demonstrate the library services that could be introduced into her classroom. As will be discussed further, the strong connection between public libraries and schools is considered important within these conversations, particularly when working to support youth on the spectrum or with other needs.

Sense of Role and Responsibility

Libraries serve communities, and youth with ASD are a part of those communities. One librarian articulately discusses the need to demonstrate this:

> Well, I mean, they're part of our community, just like people who come in who speak
> different languages or people who come in and are from different parts of the country

and they have questions about what goes on in the community. I think just because people on the spectrum, they're saying the numbers are going up as far as people being diagnosed. . . . So we need to accept their needs; understand them. They're part of the community. There's still people who are going to be not understanding or prejudiced, but as librarians we need to accept and find them what they need help with, as best we can, and if we can't then try to have someone help us to meet their needs. They're a part of the community.

When thinking about the day-to-day work in a public library, the interviewees reveal much in the way of roles and responsibilities of librarians. This finding, in particular, describes a deeper understanding of community as inclusive and reflective of the entire community a library serves.

Discussion

Although the project began with digital citizenship in mind, participants steered conversations in every direction but that topic. When directed back toward the idea of digital citizenship as programming, they seemed interested but did not seem to regard it as a priority. Instead, conversations turned to programming for youth with ASD in general. There still may be a need for digital citizenship instruction, but perhaps the findings from this study suggest that, according to the librarians, there currently is not.

Do youth feel that there is a need? Do their parents? These questions might be explored in future work. It does seem that librarians are particularly interested in providing programming that parents of youth with ASD regard as valuable. When an approach is pushed forward by actively participating parents and parent organizations, librarians listen. Despite findings not aligning with a clear need perceived by librarians to implement digital citizenship programming for youth with ASD, this study did reveal interesting themes related to parent support, inclusion, librarian prior knowledge of ASD, and collaborations. The researchers also admit that it is of course possible that it should not. Need should be based on further exploration from youth and their parents; this study shows that librarians, if not wildly enthusiastic, are receptive to this type of work.

From this sample, it is clear that some librarians are excited to explore opportunities in better supporting youth on the autism spectrum, although providing opportunities in digital citizenship specifically was largely untouched. Librarians stress the importance of collaboration at all levels, from within the school to their local communities and beyond. The participating librarians who expressed enthusiasm toward collaboration, and those who are particularly confident in moving forward with collaborative programming, appear more interested, based on the data, given individual reasons and have personal connections to youth with different needs. Finally, librarians in this study express concern about both capturing and sustaining

the attention of youth on the spectrum but not at the expense of "othering" youth with ASD from their neurotypical peers.

Librarians Are Eager to Dive In

Librarians in this small sample reflect an interest in providing services for neurodiverse youth and are already working hard to address their perceived needs. Whereas only a few years ago the idea of a sensory storytime seemed groundbreaking, now librarians are going above and beyond to provide programs and services for a greater range of library users on the autism spectrum. Yet, within this growing pool of services, online safety is not included. Librarians are largely unaware of the need for providing digital literacy programs for youth on the spectrum or are unsure or wary about how to provide such programs or services, even for neurotypical youth.

Nevertheless, it is not for lack of interest. Librarians in this study were excited to discuss the possibility of expanding programming to include online safety, especially if given training and resources to help guide them through the process. There is an untapped market of librarians who are interested in expanding programs and services for digital youth with ASD—they range from simply needing a slight nudge of suggestion to get started to a formal training session or a subject matter expert being invited in. No matter the barrier they may encounter, or spark they need, the librarians in this study were interested in providing these programs or services with varying levels of additional support.

Collaboration Is Key

Public librarians in this study continually described collaborations both within and outside of the library—with coworkers, with schools, with community members, and most of all with parents. Involving parents and families has long been a strategy for engaging youth, and it is often effective (Lopez, Caspe, and Simpson 2017). In serving youth or adults with intellectual disabilities, involving their parents or caretakers can be seen as one strategy to bolster participant numbers and garner participation. However, youth of all intellectual abilities can be on the autism spectrum and are often able to speak for and advocate for themselves—at least to the extent that any other youth can. In planning programs and services for youth with ASD, parents should be consulted to the extent that they are for any other teen library program—no more, no less.

Collaboration with schools and teachers is also described as a method for generating teen engagement, particularly when the library fills a gap in the curricula. This is particularly evident when considering digital citizenship, which is often included in information literacy instruction taking place within a school library (Oxley 2010). As suggested by the passage of state legislation requiring schools incorporate digital citizenship in school curricula, there is an

increased awareness of the need for online safety education. Perhaps school librarians, with their strong background in information literacy instruction and day-to-day interactions with students, can take the lead in providing some degree of digital citizenship education alongside teachers, parents, and the community.

Young adults can be a challenging audience for a public library to reach (Jones and Shoemaker 2001), and any successful measure to get them in can feel like a victory for a librarian. Collaborating with parents and schools to obtain active participation and engagement is a common strategy described by interview participants—and a successful one—but collaboration should not come at the cost of sacrificing the input and opinions of the youth themselves. Collaborations also need to include the youth themselves, taking into account their needs and ideas as services are designed specifically for them. Not all teens—neurodiverse or neurotypical—have a strong parent advocate; services designed for teens need to be designed based on their needs, not the needs as perceived by a parent or caregiver speaking for them.

Life Skills

Programming to support life skills is gaining traction in libraries and frequently came up during interviews. "Life skills" has become a popular term in recent years for teen and emerging adult programming, with classes developed to help with the transition to adulthood ranging from managing money to relationship development (Lucas 2017; Ford 2018). Life skills courses are being offered in multiple formats including online and through formal institutions, and librarians have taken notice. Although this term was not introduced by the interviewers, it was mentioned unprovoked and independently in multiple interviews with librarians. Incorporating an element of digital citizenship into life skills programs could be a way in which librarians could offer this programming as part of a larger approach. In addition, life skills programs are typically designed to be inclusive of all members of the teen population, not just singling out those on the autism spectrum. Librarians can use this to suit their needs, depending on their library and the population they serve—a series of programs could be offered under the life skills umbrella in which digital citizenship is just one theme of many, perhaps reaching a broader audience with this on-message branding. This is a way to provide training that is beneficial especially for teens on the spectrum, but inclusive and important for all teens.

Librarian Knowledge and Personal Experience Matters

Librarians come to the field from a variety of backgrounds and with various experiences, both professional and personal, that shape who they are and how they operate professionally. Librarians who participated in this study were largely called to action in their own workplace based on personal backgrounds and influences. Though the researchers and the participants feel a push to explore this work, it is likely that those who do not have experience or a background in neurodiversity will not feel a sense of urgency in creating, promoting, and conducting

digital literacy programs for this population. Instead, it is those who are already attuned to their needs and experiences who are likely to focus here; this is logical, given that librarians might focus their attentions in a variety of areas. Librarians' personal experiences and preferences will shape where their attention and efforts lie. It is important, then, for those librarians who are passionate about working with teens on the spectrum to make replication easy. Creating and packaging ready-to-go content, made especially for implementation in public libraries, is one way for librarians to assist their peers in providing digital citizenship programs for youth with ASD. Those with personal knowledge of ASD understand the need for more tailored digital citizenship programming; it is important to educate their peers on the value here as well.

Education is important. Even study participants who already had some interest in improving services to youth with ASD demonstrated increased interest as interviews proceeded. It was an "aha" moment for some of the participants, as they talked through the possibilities at their own libraries. Multiple librarians mentioned that they did not consider digital citizenship training as important for their patrons on the spectrum until the interview, at which point comments included wanting to talk with parents about the possibility for programming, incorporating messaging on their social media page, applying for local grant funding, and supporting ongoing programming. Planting the seed of this type of program lit a spark for librarians who were already familiar with working with this population. Similar conversations need to take place to introduce the idea to those with less background in the area.

Because youth are not required to attend events at the public library, introducing educational programming needs to be approached with particular care. Not only do the lessons need to be informative, but they need to be engaging enough to capture the attention of teens. Based on the findings in this study, success might be found with short lessons incorporated into larger programs or events. In this way, neurodiverse teens are able to interact and engage with neurotypical teens during programs, whether through inclusive programming or a more formal buddy system. It is also important that staff are educated and comfortable with the services and education they will be providing. That level of education and comfort will range from librarian to librarian and could consist of simply understanding that the topic is important and bringing in a cyber safety local expert or conducting workshops him- or herself for library patrons. No matter the approach, librarian knowledge about neurodiversity and the need for digital citizenship education is a crucial first step.

Bringing Them in the Doors

No matter what is offered, it is important that it fits the needs of the population and is engaging such that teens on the spectrum want to attend, want to engage with the content, and want to learn. It is not enough to only create new services or programming; teens also need to be interested in attending. Public libraries, where attendance is voluntary, are at a

disadvantage compared with schools that offer training and courses in digital literacy. School coursework is required, and digital citizenship lessons can be built into existing lesson plans.

Libraries are offering voluntary programming, so it is not enough to be educational—it has to be engaging and inviting too. Some librarians might consider building snippets of digital citizenship lessons into regularly scheduled programs, whether for neurodiverse or inclusive audiences, to provide educational information for teens prior to a big-ticket event such as a gaming night. These quick tips could be included in special needs programming, teen programming, computer courses, and more and could reach not just those with ASD but all digital users with broad but applicable information.

Partnering youth on the spectrum with neurotypical peers has potential for success in that teens might be more likely to participate, as one interview participant described. The teens with ASD appreciated having a buddy, and the neurotypical teens reported that it was fulfilling—so much so that they chose to come in to the library with their buddies instead of taking a week off for spring break. In some instances, when library programming was developed by interviewed librarians, it received little interest from parents or youth. The youth were instead more interested in "hanging out, messing around, and geeking out," especially with new media (Ito et al. 2009, 17). For these youth, they want to be included within the rest of the group. Having a partner or a buddy system for diverse youth has been shown to be successful in some settings (Bass and Mulick 2007); perhaps by incorporating educational sessions into an already established peer mentoring or "buddy" situation, both neurodiverse and typical teens could be interested in attending while benefiting from the information.

Inclusive Programming

Although the librarians interviewed were interested in developing targeted programming and services for youth on the spectrum, a number reflected even more on offering inclusive services for all youth patrons. One librarian participant has a regular gaming night that draws both neurotypical and neurodiverse young patrons. Not only do these programs provide youth with ASD opportunities to socialize, they also prevent the "othering" factor that can occur when isolating special needs children, youth, and adults. Librarians can and are engaging in more inclusive programming that encourages youth with autism to feel valued as part of the group activity rather than an outsider.

This study initially concentrated on opportunities for digital citizenship education for youth with ASD within public libraries by librarians. However, this is not what the data revealed. Prevention strategies, cyberbullying intervention, and even digital citizenship itself are under debate, study, and sometimes skepticism (Lenhart et al. 2011; Bowler, Mattern, and Knobel 2014; Barlett 2017). Youth are more likely to talk with their friends over parents or other adults if they are the victims of bullying of cyberbullying, even those with close relationships to a family

member or trusted adult (Phillips 2016). Inclusive programming delivers an opportunity for teens to get together, build social networks, and sustain a supportive group that goes well beyond the existing digital citizenship education offerings.

Implications for LIS Educators

LIS educators can contribute to the preparation of future librarians in supporting youth with ASD, particularly considering information literacy and digital literacy. The findings and discussion points discovered in this early study should be further examined as LIS educators evaluate the services being created for youth on the autism spectrum.

In addition, as cyberbullying and other forms of online harassment occur among both neurodiverse and neurotypical children and youth, LIS educators should make a step to include readings, resources, and discussion topics for MLIS students on the how's and why's of the digital lived experiences of youth.

LIS educators have long provided guidance for outreach to underserved populations, youth advocacy, and special needs program development (Jones and Shoemaker 2001; Curry 2005; Jones 2007). These findings suggest that a combination of education is needed for both new librarians and more established librarians to feel prepared to support youth on the autism spectrum in the library. Comfort and knowledge are key for getting librarian buy-in to provide tailored programming to support the digital lives of teens with ASD.

To help prepare upcoming graduates, LIS programs should consider incorporating or enhancing instruction to support digital literacy skills, particularly for special populations. In this way, librarians will be familiar with the area upon graduation and prepared to incorporate the knowledge gained in their coursework with the population they serve. For librarians in the position to supervise or train staff, a thorough evaluation of library services for youth with ASD and other neurodiverse youth is critical. One challenge this study faced is the limited amount of services and programming specifically for special needs youth. Given the prevalence of autism in the general population, it only makes sense that all librarians anticipate and plan for providing supportive services for these members of their communities.

Conclusion

As this study is an early step into a larger discussion around the question of digital citizenship instruction for youth with ASD, there is much more to be uncovered. One direction for future research is to speak with neurodiverse teens themselves to determine if they feel that support in this area would be helpful. Based on the responses from the librarians, a different approach is needed, which raises questions about the nature of digital citizenship education.

The conversations highlighted in this study could be turned into a number of action items, which might be tailored to best meet the needs of any library community. Some items might

include working with teen advisory boards to create inclusive programming for all teens with a broader scope of the concept of digital citizenship, incorporating digital citizenship programs into neurodiverse groups librarians are already working with, offering digital citizenship as a small part of a broader life skills program, or reaching out to local school librarians and other youth-focused community organizations to build strong connections for support of special needs youth.

Librarians are questioning how to meet the burgeoning needs of a digital public. In doing so, they are discovering gaps in the MLIS curriculum regarding the needs of neurotypical and neurodiverse digital youth. One of these gaps is a lack of training and education on supporting special needs youth. There has been a slow increase in inclusive library programming and outreach to children and youth with ASD. This article does not attempt to describe the best approach but rather to begin the conversation. Librarians are increasingly providing programming for diverse youth, often for youth on the spectrum. Youth on the spectrum, neurodiverse youth, and neurotypical youth must be involved in the conversation to help librarians create a youth-focused inclusive and equitable library space.

References

Anderson, Amelia. 2016. "Wrong Planet, Right Library: College Students with Autism Spectrum Disorder and the Academic Library." PhD diss., Florida State University.

Anderson, Amelia, and Nancy Everhart. 2015. "Project PALS: Ensuring Success in Libraries for Patrons with Autism." *Teacher Librarian* 43 (2): 24–25.

Baio, Jon, Lisa Wiggins, Deborah L. Christensen, Matther J. Maenner, Julie Daniels, Zachary Warren, Margaret Kurzius-Spencer, et al. 2018. "Prevalence of Autism Spectrum Disorder among Children Aged 8 Years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States." *Morbidity and Mortality Weekly Report.* https://www.cdc.gov/mmwr/volumes/67/ss/ss6706a1.htm.

Barlett, Christopher P. 2017. "From Theory to Practice: Cyberbullying Theory and Its Application to Intervention." *Computers in Human Behavior* 72 (July): 269–75.

Bass, Jennifer D., and James A. Mulick. 2007. "Social Play Skill Enhancement of Children with Autism Using Peers and Siblings as Therapists." *Psychology in the Schools* 27 (August): 727–35.

Bowler, Leanne, Eleanor Mattern, and Cory Knobel. 2014. "Developing Design Interventions for Cyberbullying: A Narrative-Based Participatory Approach." Paper presented at IConference, Berlin.

Common Sense Education. n.d. "Digital Citizenship Curriculum & EdTech Reviews." https://www.commonsense.org/education/.

Common Sense Media. 2015. "Digital Citizenship." https://www.digitalcompass.org/digital-citizenship.html.

Cottrell, Megan. 2016a. "Aging Out of Sensory Storytime: How Libraries Can Provide Services for Teens and Young Adults on the Autism Spectrum." *American Libraries Magazine*, April 29. https://americanlibraries magazine.org/2016/04/29/libraries-autism-services-aging-sensory-storytime/.

Cottrell, Megan. 2016b. "Storytime for the Spectrum: Libraries Add Services for Children with Autism." *American Libraries Magazine*, March 1. https://americanlibrariesmagazine.org/2016/03/01/sensory -storytime-spectrum-libraries-add-services-for-children-with-autism/.

Curry, Ann. 2005. "If I Ask, Will They Answer? Evaluating Public Library Reference Service to Gay and Lesbian Youth." *Reference and User Services Quarterly* 45 (1): 65–75.

Davidson, Joyce. 2008. "Autistic Culture Online: Virtual Communication and Cultural Expression on the Spectrum." *Social and Cultural Geography* 9 (7): 791–806.

Didden, Robert, Ron H. J. Scholte, Hubert Korzilius, Jan M. H. De Moor, Anne Vermeulen, Mark O'Reilly, Russell Lang, and Giulio E. Lancioni. 2009. "Cyberbullying among Students with Intellectual and Developmental Disability in Special Education Settings." *Developmental Neurorehabilitation* 12 (3): 146–51.

Eng, Alice. 2017. "Neurodiversity in the Library: One Librarian's Experience." *In the Library with the Lead Pipe*, June 28. http://www.inthelibrarywiththeleadpipe.org/2017/neurodiversity-in-the-library/.

Ennis-Cole, Demetria, and Daniella Smith. 2011. "Assistive Technology and Autism: Expanding the Technology Leadership Role of the School Librarian." *School Libraries Worldwide* 17 (2): 86–98.

Farmer, Lesley. 2013. *Library Services for Youth with Autism Spectrum Disorders.* Chicago: American Library Association.

Ford, Anne. 2018. "Adulting 101: When Libraries Teach Basic Life Skills." *American Libraries Magazine*, May 1. https://americanlibrariesmagazine.org/2018/05/01/adulting-101-library-programming/.

Hickey, Katherine, Tara Golden, and Amy Thomas. 2018. "Sensory Play in Libraries: A Survey of Different Approaches." *Children and Libraries* 16 (3): 18–21.

Hill, Valerie. 2015. "Digital Citizenship through Game Design in Minecraft." *New Library World* 116 (7/8): 369–82.

Ito, Mizuko, Sonja Baumer, Matteo Bittanti, danah boyd, Rachel Cody, Becky Herr-Stephenson, Heather A. Horst, et al. 2009. *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media.* Cambridge, MA: MIT Press.

Jones, Patrick. 2007. "Connecting Young Adults and Libraries in the 21st Century." *Australasian Public Libraries and Information Services* 20 (2): 48–54.

Jones, Patrick, and Joel Shoemaker. 2001. *Do It Right! Best Practices for Serving Young Adults in School and Public Libraries.* New York: Neal-Schuman.

Klipper, Barbara. 2014. *Programming for Children and Teens with Autism Spectrum Disorder*. Chicago: American Library Association.

Krueger, Nicole. 2017. "Digital Citizenship Is the New Citizenship." *International Society for Technology in Education.* https://www.iste.org/explore/digital-citizenship/digital-citizenship-new-citizenship.

Kuo, Melissa H., Gael I. Orsmond, Wendy J. Coster, and Ellen S. Cohn. 2014. "Media Use among Adolescents with Autism Spectrum Disorder." *Autism* 18 (8): 914–23.

Lenhart, Amelia, Mary Madden, Aaron Smith, Kristen Purcell, and Kathryn Zickuhr. 2011. "Teens, Kindness and Cruelty on Social Network Sites: How American Teens Navigate the New World of Digital Citizenship." Pew Internet and American Life Project. https://eric.ed.gov/?id=ED537516.

Liias, Marko, Hans Zeiger, Andy Billig, Sam Hunt, and David Frockt. 2017. "Digital Citizenship." Washington State Legislature. https://app.leg.wa.gov/billsummary?BillNumber=5449&Year=2017.

Lopez, M. Elena, Margaret Caspe, and Christina Simpson. 2017. "Engaging Families in Public Libraries." *Public Library Quarterly* 36 (4): 318–33.

Lucas, Teresa. 2017. "Program Model: Adulting 101." *Programming Librarian*, March 22. http://www.programminglibrarian.org/programs/adulting-101.

Mears, Sarah. 2017. "It Takes a Community to Raise a Reader: Autism Friendly Libraries." Paper presented at the IFLA annual meeting. http://library.ifla.org/1744/1/138-mears-en.pdf.

NATTAP (Network of Autism Training and Technical Assistance Programs). 2019. "The Annual Bullying Survey 2019." https://www.ditchthelabel.org/wp-content/uploads/2019/11/The-Annual-Bullying-Survey -2019-1.pdf.

Orsmond, Gael I., and Hsin-Yu Kuo. 2011. "The Daily Lives of Adolescents with an Autism Spectrum Disorder: Discretionary Time Use and Activity Partners." *Autism* 15 (5): 579–99.

Oxley, Cathy. 2010. "Digital Citizenship: Developing an Ethical and Responsible Online Culture." Paper presented at the International Association of School Librarianship Annual Conference, Zillmere.

Oxley, Cathy. 2011. "Digital Citizenship: Developing an Ethical and Responsible Online Culture." *Access* 25 (3): 5–9.

Phillips, Abigail. 2014. "More Than Just Books: Librarians as a Source of Support for Cyberbullied Young Adults." *Journal of Research on Libraries and Young Adults* 4 (1). http://www.yalsa.ala.org/jrlya/2014/05 /more-than-just-books-librarians-as-a-source-of-support-for-cyberbullied-young-adults/.

Phillips, Abigail. 2016. "The Empathetic Librarian: Rural Librarians as a Source of Support for Rural Cyberbullied Young Adults." PhD diss., Florida State University.

Phillips, Abigail, and Victor Lee. 2019. "Whose Responsibility Is It? A Statewide Survey of School Librarians on Responsibilities and Resources for Teaching Digital Citizenship." *School Library Research* 22. https:// files.eric.ed.gov/fulltext/EJ1218561.pdf.

Ribble, Mike. 2017. "Nine Elements: Nine Themes of Digital Citizenship." Digital Citizenship: Using Technology Appropriately. http://digitalcitizenship.net/nine-elements.html.

Saldaña, Johnny. 2015. *The Coding Manual for Qualitative Researchers*. Thousand Oaks, CA: Sage.

Stratton, Keven, and Howard Stephenson. 2015. "Safe Technology Utilization and Digital Citizenship in Public Schools." https://le.utah.gov/~2015/bills/hbillenr/HB0213.pdf.

Vandebosch, Heidi, Karolien Poels, and Gie Deboutte. 2014. "Schools and Cyberbullying: Problem Perception, Current Actions and Future Needs." *International Journal of Cyber Society and Education* 7 (1): 29–48. http://academic-pub.org/ojs/index.php/IJCSE/article/view/1149.

Abigail L. Phillips: assistant professor, University of Wisconsin–Milwaukee, School of Information Studies. In 2016, Phillips received her PhD in information studies from the School of Information at Florida State University. Before joining the SOIS faculty, she held the position of postdoctoral fellow in the Department of Instructional Technology and Learning Sciences at Utah State University. Her research interests include youth, cyberbullying, empathy, mental illness, neurodiversity, and maker education. She is active on Twitter (@abigailleigh) and her website (abigailleighphillips .com). Email: abileigh@uwm.edu.

Amelia Anderson: assistant professor, Old Dominion University, Darden College of Education and Professional Studies. Anderson's current research projects explore the intersection of neurodiversity and library experiences, particularly for young adults and adults on the autism spectrum. She earned her PhD and MLIS from Florida State University and previously worked as a public librarian. Email: amanders@odu.edu.